SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

	(Amendment No)
	by the Registrant by a Party other than the Registrant
Check	the appropriate box:
	Preliminary Proxy Statement Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) Definitive Proxy Statement Definitive Additional Materials Soliciting Material Pursuant to § 240.14a-12
	Marker Therapeutics, Inc.
	(Name of Registrant as Specified In Its Charter)
	(Name of Person(s) Filing Proxy Statement if other than the Registrant)
Payme	ent of Filing Fee (Check all boxes that apply):
	No fee required. Fee paid previously with preliminary materials Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0 11



4551 Kennedy Commerce Drive Houston, Texas 77032

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held On June 6, 2023

Dear Stockholder:

You are cordially invited to attend the Annual Meeting of Stockholders of Marker Therapeutics, Inc., a Delaware corporation (the "Company"). The meeting will be held on Tuesday, June 6, 2023 at 8:00 a.m. Central Time and will be a virtual stockholder meeting through which you can listen to the meeting, submit questions and vote online. You must register for the virtual meeting via http://viewproxy.com/markertherapeutics/2023/htype.asp no later than 11:59 p.m. Eastern Time on Monday, June 5, 2023. The meeting will be held for the following purposes:

- 1. To elect the Board of Directors' five nominees for director to hold office until the next Annual Meeting of Stockholders.
- 2. To approve, on an advisory basis, the compensation of the Company's named executive officers, as disclosed in this proxy statement.
- 3. To indicate, on an advisory basis, the preferred frequency of future shareholder advisory votes on the compensation of the Company's named executive officers.
- 4. To ratify the selection by the Audit Committee of the Board of Directors of Marcum LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2023.
- 5. To conduct any other business properly brought before the meeting.

These items of business are more fully described in the Proxy Statement accompanying this Notice.

The record date for the Annual Meeting is April 10, 2023. Only stockholders of record at the close of business on that date may vote at the meeting or any adjournment thereof.

Important Notice Regarding the Availability of Proxy Materials for the Virtual Annual Meeting of Stockholders to Be Held on Tuesday, June 6, 2023 at 8:00 a.m. Central Time.

Register for the virtual Annual Meeting via http://viewproxy.com/markertherapeutics/2023/htype.asp.

The proxy statement and annual report to stockholders are available at http://www.viewproxy.com/markertherapeutics/2023.

By Order of the Board of Directors,

Michael J. Loiacono

Secretary

Houston, TX April 28, 2023 You are cordially invited to attend the virtual Annual Meeting. You will not be able to attend the Annual Meeting in person. Whether or not you expect to attend the meeting, please complete, date, sign and return the enclosed proxy, or vote over the telephone or the internet as instructed in these materials, as promptly as possible in order to ensure your representation at the meeting. A return envelope (which is postage prepaid if mailed in the United States) has been provided for your convenience. Even if you have voted by proxy, you may still vote online if you attend the virtual Annual Meeting. Please note, however, that if your shares are held of record by a broker, bank or other nominee and you wish to vote at the meeting, you must obtain a proxy issued in your name from that record holder.

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MARKER THERAPEUTICS, INC. 4551 Kennedy Commerce Drive Houston, Texas 77032

PROXY STATEMENT FOR THE 2023 ANNUAL MEETING OF STOCKHOLDERS JUNE 6, 2023

OUESTIONS AND ANSWERS ABOUT THESE PROXY MATERIALS AND VOTING

Why am I receiving these materials?

We have sent you these proxy materials because the Board of Directors (the "Board" or "Board of Directors") of Marker Therapeutics, Inc. (sometimes referred to as the "Company" or "Marker") is soliciting your proxy to vote at the 2023 Annual Meeting of Stockholders, including at any adjournments or postponements of the meeting. You are invited to attend the annual meeting to vote on the proposals described in this proxy statement. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete, sign and return the enclosed proxy card, or follow the instructions below to submit your proxy over the telephone or through the internet.

We intend to mail these proxy materials on or about April 28, 2023 to all stockholders of record entitled to vote at the Annual Meeting.

How do I attend the Annual Meeting?

The Annual Meeting will be a virtual stockholder meeting through which you can listen to the meeting, submit questions and vote online. In order to attend the Annual Meeting, you must first register at http://viewproxy.com/markertherapeutics/2023/htype.asp by 11:59 p.m. Eastern Time on Monday, June 5, 2023. Please follow the instructions on the registration page. You will then receive a meeting invitation by email with your unique link to join the Annual Meeting along with a password prior to the meeting date. We recommend that you log on a few minutes before the Annual Meeting to ensure that you are logged in when the meeting begins. Information on how to vote online during the Annual Meeting is discussed below.

We have decided to hold a virtual stockholder meeting to enable our stockholders to participate from any location around the world that is convenient to them. Stockholders that attend the virtual meeting will be afforded the same rights and opportunities to participate as they would at an in-person meeting. You will not be able to attend the Annual Meeting in person.

Both stockholders of record and street name stockholders will be able to attend the Annual Meeting via live audio webcast, submit their questions during the meeting and vote their shares electronically at the Annual Meeting.

Who can vote at the Annual Meeting?

Only stockholders of record at the close of business on April 10, 2023 will be entitled to vote at the Annual Meeting. On this record date, there were 8,798,829 shares of common stock outstanding and entitled to vote.

Stockholder of Record: Shares Registered in Your Name

If on April 10, 2023 your shares were registered directly in your name with Marker's transfer agent, American Stock Transfer & Trust Company, LLC, then you are a stockholder of record. As a stockholder of record, you may vote online during the meeting or vote by proxy. Whether or not you plan to attend the meeting, we urge you to fill out and return the enclosed proxy card or vote by proxy over the telephone or internet as instructed below to ensure your vote is counted. If you are a registered holder, your virtual control number will be on your Notice of Internet Availability of Proxy Materials or proxy card.

Beneficial Owner: Shares Registered in the Name of a Broker or Bank

If on April 10, 2023 your shares were held, not in your name, but rather in an account at a brokerage firm, bank or other similar organization, then you are the beneficial owner of shares held in "street name" and these

proxy materials are being forwarded to you by that organization. The organization holding your account is considered to be the stockholder of record for purposes of voting at the Annual Meeting. As a beneficial owner, you have the right to direct your broker, bank or other agent regarding how to vote the shares in your account. However, since you are not the stockholder of record, you may not vote your shares online during the Annual Meeting unless you request and obtain a legal proxy from your broker, bank or other agent. During the registration process, you will be asked to upload or email the legal proxy provided to you by your broker, bank or other agent. You are also invited to attend the Annual Meeting so long as you demonstrate proof of stock ownership. Instructions on how to demonstrate proof of stock ownership are posted at http://viewproxy.com/markertherapeutics/2023/htype.asp. On the day of the Annual Meeting, if you are a beneficial holder, you may vote during the meeting only if, during registration and in advance of the meeting, you emailed or uploaded a copy of your legal proxy to VirtualMeeting@viewproxy.com as instructed below.

What am I voting on?

There are four matters scheduled for a vote:

- Election of five directors (Proposal 1);
- Advisory approval of the compensation of the Company's named executive officers, as disclosed in this proxy statement (Proposal 2);
- Advisory indication of the preferred frequency of future shareholder advisory votes on the compensation of the Company's named executive officers (Proposal 3); and
- Ratification of selection by the Audit Committee of the Board of Directors of Marcum LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2023 (Proposal 4).

What if another matter is properly brought before the meeting?

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on those matters in accordance with their best judgment.

How do I vote?

You may either vote "For" all the nominees to the Board of Directors or you may "Withhold" your vote for any nominee you specify. For Proposals 2 and 4, you may vote "For" or "Against" or abstain from voting. With regard to Proposal 3, your advisory vote on how frequently we should solicit shareholder advisory approval of compensation of the Company's named executive officers, you may vote for any one of the following: "One Year", "Two Years" or "Three Years", or you may abstain from voting.

The procedures for voting are fairly simple:

Stockholder of Record: Shares Registered in Your Name

If you are a stockholder of record, you may vote online during the Annual Meeting, vote by proxy using the enclosed proxy card, vote by proxy over the telephone or vote by proxy through the internet. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure your vote is counted. You may still attend the meeting and vote online during the meeting even if you have already voted by proxy.

- To vote online during the meeting, you may vote using the link that will be provided on the virtual meeting screen, or you may visit www.AALvote.com/MRKR while the polls are open. In order to vote during the meeting, you will need your virtual control number, which will be on your Notice of Internet Availability of Proxy Materials or proxy card.
- To vote using the proxy card, simply complete, sign and date the enclosed proxy card and return it promptly in the envelope provided. If you return your signed proxy card to us before the Annual Meeting, we will vote your shares as you direct.
- To vote over the telephone, dial toll-free 1-866-804-9616 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the virtual control number from your Notice of

Internet Availability of Proxy Materials or proxy card. Your telephone vote must be received by 11:59 p.m. Eastern Time on Monday, June 5, 2023 to be counted.

• To vote through the internet, go to www.AALVote.com/MRKR to complete an electronic proxy card. Please have your enclosed proxy card available when you access the voting website and follow the prompts to vote your shares. Your internet vote must be received by 11:59 p.m. Eastern Time on Monday, June 5, 2023 to be counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank or other agent, you should have received a voting instruction form with these proxy materials from that organization rather than from Marker. Simply complete and mail the voting instruction form to ensure that your vote is counted. Alternatively, you may vote by telephone or over the internet as instructed by your broker or bank. To vote online during the Annual Meeting, you must obtain a legal proxy from your broker, bank or other agent. Follow the instructions from your broker, bank or other agent included with these proxy materials, or contact that organization to request a proxy form. In advance of the Annual Meeting, you will need to upload or email a copy of the legal proxy from your broker, bank or other agent to VirtualMeeting@viewproxy.com in order to vote at the Annual Meeting. To vote online during the meeting, you may vote using the link that will be provided on the virtual meeting screen, or you may visit www.AALvote.com/MRKR while the polls are open. You will need your virtual control number, which will be assigned to you in your confirmation of registration email, in order to vote during the meeting.

Internet proxy voting has been provided to allow you to vote your shares online, with procedures designed to ensure the authenticity and correctness of your proxy vote instructions. However, please be aware that you must bear any costs associated with your internet access, such as usage charges from internet access providers and telephone companies.

How many votes do I have?

On each matter to be voted upon, you have one vote for each share of common stock you own as of April 10, 2023.

If I am a stockholder of record and I do not vote, or if I return a proxy card or otherwise vote without giving specific voting instructions, what happens?

If you are a stockholder of record and do not vote by completing your proxy card, by telephone, through the internet or online during the Annual Meeting, your shares will not be voted.

If you return a signed and dated proxy card or otherwise vote without marking voting selections, your shares will be voted, as applicable:

- "For" the election of all five nominees for director;
- "For" the advisory approval of compensation of the Company's named executive officers;
- "For" "One Year" as the preferred frequency of future shareholder advisory votes to approve compensation of the Company's named executive officers; and
- "For" the ratification of Marcum LLP as independent auditors for the year ending December 31, 2023.

If any other matter is properly presented at the meeting, your proxyholder (one of the individuals named on your proxy card) will vote your shares using his or her best judgment.

If I am a beneficial owner of shares held in street name and I do not provide my broker or bank with voting instructions, what happens?

If you are a beneficial owner of shares held in street name and you do not instruct your broker, bank or other agent how to vote your shares, your broker, bank or other agent may still be able to vote your shares in its

discretion. In this regard, under stock exchange rules, brokers, banks and other securities intermediaries that are subject to such rules may use their discretion to vote your "uninstructed" shares with respect to matters considered to be "routine" under such rules, but not with respect to "non-routine" matters. In this regard, Proposals 1, 2 and 3 are considered to be "non-routine" under such rules, meaning that your broker may not vote your shares on those proposals in the absence of your voting instructions. However, Proposal 4 is considered to be "routine" under such rules, meaning that if you do not return voting instructions to your broker by its deadline, your shares may be voted by your broker in its discretion on Proposal 4.

If you are a beneficial owner of shares held in street name, in order to ensure your shares are voted in the way you would prefer, you must provide voting instructions to your broker, bank or other agent by the deadline provided in the materials you receive from your broker, bank or other agent.

Who is paying for this proxy solicitation?

We will pay for the entire cost of soliciting proxies. In addition to these proxy materials, our directors and employees may also solicit proxies in person, by telephone or by other means of communication. Directors and employees will not be paid any additional compensation for soliciting proxies. We may also reimburse brokerage firms, banks and other agents for the cost of forwarding proxy materials to beneficial owners.

What does it mean if I receive more than one set of proxy materials?

If you receive more than one set of proxy materials, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on the proxy cards in the proxy materials to ensure that all of your shares are voted.

Can I change my vote after submitting my proxy?

Stockholder of Record: Shares Registered in Your Name

Yes. You can revoke your proxy at any time before the final vote at the meeting. If you are the record holder of your shares, you may revoke your proxy in any one of the following ways:

- You may submit another properly completed proxy card with a later date.
- You may grant a subsequent proxy by telephone or through the internet.
- You may send a timely written notice that you are revoking your proxy to Marker Therapeutics, Inc., Attention: Secretary at 4551 Kennedy Commerce Drive, Houston, Texas 77032.
- You may attend the Annual Meeting virtually and vote online. Simply attending the meeting virtually will not, by itself, revoke your proxy.

Your most current proxy card or telephone or internet proxy is the one that is counted.

Beneficial Owner: Shares Registered in the Name of Broker or Bank

If your shares are held by your broker, bank or other agent, you should follow the instructions provided by your broker, bank or other agent.

When are stockholder proposals and director nominations due for next year's Annual Meeting?

To be considered for inclusion in next year's proxy materials, your written proposal must be received by our Secretary by December 30, 2023. If you wish to submit a proposal (including a director nomination) at the meeting that is not to be included in next year's proxy materials, you must do so not earlier than February 7, 2024 and not later than March 8, 2024. Stockholder proposals and director nominations should be addressed to Marker Therapeutics, Inc., Attention: Secretary, 4551 Kennedy Commerce Drive, Houston, Texas 77032. Your notice to the Secretary must set forth information specified in our bylaws.

If you propose to bring business before an annual meeting of stockholders other than a director nomination, your notice must include, as to each matter proposed, the following: (1) a brief description of the business

desired to be brought before such annual meeting and the reasons for conducting that business at the annual meeting, (2) the text of the proposal, including the text of any resolutions proposed for consideration and (3) any material interest you have in that proposal.

If you propose to nominate an individual for election as a director, your notice must also include, as to each person you propose to nominate for election as a director, the following: (1) all information related to such nominee that would be required to be disclosed in solicitations of proxies for the election of such nominee as a director pursuant to Regulation 14A under the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), including such person's written consent to being named in the proxy statement as a nominee and serving as a director, if elected, and (2) a description of all direct and indirect compensation and other material monetary arrangements, agreements or understandings during the past three years, and any other material relationship, if any, between or concerning you and your affiliates, on the one hand, and the proposed nominee or any of his or her affiliates, on the other hand. We may require any proposed nominee to furnish other information as we may reasonably require to determine the eligibility of the proposed nominee to serve as an independent director or that could be material to a reasonable stockholder's understanding of the independence, or lack of independence, of the proposed nominee.

For more information, and for more detailed requirements, please refer to our bylaws filed as Exhibit 3.6 to our Current Report on Form 8-K (File No. 001-37939), filed with the SEC on October 17, 2018.

In addition to satisfying the foregoing requirements under our bylaws, to comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than our nominees must provide notice and the additional information required by Rule 14a-19 under the Exchange Act.

How are votes counted?

Votes will be counted by the inspector of election appointed for the meeting, who will separately count, for the proposal to elect directors, votes "For," "Withhold" and broker non-votes; with respect to Proposals 2 and 4, votes "For" and "Against," abstentions and, if applicable, broker non-votes; and with respect to Proposal 3, votes for "One Year," "Two Years," "Three Years," abstentions and broker non-votes. Abstentions will be counted towards the vote total for each of Proposals 2, 3 and 4 and, with respect to Proposals 2 and 4, will have the same effect as "Against" votes. With respect to Proposal 3, abstentions will have the same effect as votes against each of the proposed voting frequencies. Broker non-votes on Proposals 2 and 3 will have no effect and will not be counted towards the vote total for any of those proposals. Since brokers have authority to vote on your behalf with respect to Proposal 4, we do not expect broker non-votes on this proposal.

What are "broker non-votes"?

A "broker non-vote" occurs when your broker submits a proxy for the meeting with respect to "routine" matters but does not vote on "non-routine" matters because you did not provide voting instructions on these matters. These un-voted shares are counted as "broker non-votes." Proposals 1, 2 and 3 are considered to be "non-routine" under stock exchange rules and we therefore expect broker non-votes on these proposals. However, as Proposal 4 is considered "routine" under stock exchange rules, we do not expect broker non-votes on this proposal.

As a reminder, if you a beneficial owner of shares held in street name, in order to ensure your shares are voted in the way you would prefer, you must provide voting instructions to your broker, bank or other agent by the deadline provided in the materials you receive from your broker, bank or other agent.

How many votes are needed to approve each proposal?

For Proposal 1, the election of directors, the five nominees receiving the most "For" votes from the holders of shares present online at the meeting or represented by proxy and entitled to vote on the election of directors will be elected. Only votes "For" will affect the outcome.

Proposal 2, the advisory approval of the compensation of the Company's named executive officers, will be considered to be approved if it receives "For" votes from the holders of a majority of shares present online at

the meeting or represented by proxy and entitled to vote on the matter. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.

For Proposal 3, the advisory vote on the frequency of future shareholder advisory votes on executive compensation, the frequency receiving the votes of the holders of a majority of shares present online at the meeting or represented by proxy and entitled to vote on the matter will be considered the frequency preferred by the shareholders. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Broker non-votes will have no effect.

For Proposal 4, the ratification of the selection of Marcum LLP as the Company's independent registered public accounting firm for fiscal year 2023, will be approved if it receives "For" votes from the holders of a majority of shares present online at the meeting or represented by proxy and entitled to vote on the matter. If you "Abstain" from voting, it will have the same effect as an "Against" vote. Since brokers have authority to vote on your behalf with respect to Proposal 4, we do not expect broker non-votes on this proposal.

What is the quorum requirement?

A quorum of stockholders is necessary to hold a valid meeting. A quorum will be present if stockholders holding at least a majority of the outstanding shares entitled to vote are present online at the virtual meeting or represented by proxy. On the record date, there were 8,798,829 shares outstanding and entitled to vote. Thus, the holders of 4,399,415 shares must be present online at the virtual meeting or represented by proxy at the meeting to have a quorum.

Abstentions and broker non-votes will be counted towards the quorum requirement. If there is no quorum, the holders of a majority of shares present online at the meeting at the virtual meeting or represented by proxy may adjourn the meeting to another date.

How do I ask a question at the Annual Meeting?

Only stockholders of record as of April 10, 2023 may submit questions or comments at the Annual Meeting. If you would like to submit a question, you must first register for the Annual Meeting at http://viewproxy.com/markertherapeutics/2023/httpe.asp by 11:59 p.m. Eastern Time on Monday, June 5, 2023 and, once you join the meeting, you can type your question in the questions/chat box in the meeting portal.

To help ensure that we have a productive and efficient meeting, and in fairness to all stockholders in attendance, you will also find posted our rules of conduct for the Annual Meeting when you log in prior to the start of the Annual Meeting. In accordance with the rules of conduct, we ask that you limit your remarks to one brief question or comment that is relevant to the Annual Meeting or our business and that such remarks are respectful of your fellow stockholders and meeting participants. Our management may group questions by topic with a representative question read aloud and answered. In addition, questions may be ruled out of order if they are, among other things, irrelevant to our business, related to pending or threatened litigation, disorderly, repetitious of statements already made, or in furtherance of the speaker's own personal, political or business interests. Questions will be addressed in the "Question and Answer" portion of the Annual Meeting.

What do I do if I have technical difficulties in connection with the Annual Meeting?

There will be technicians ready to assist you with any technical difficulties you may have accessing the annual meeting live audio webcast. Please be sure to check in by 7:45 a.m. Central Time on June 6, 2023, the day of the meeting, so that any technical difficulties may be addressed before the annual meeting live audio webcast begins. If you encounter any difficulties accessing the webcast during the check-in or meeting time, please email VirtualMeeting@viewproxy.com or call 1-866-612-8937.

Will a list of record stockholders as of the record date be available?

A list of our record stockholders as of the close of business on the record date will be made available to stockholders during the meeting. In addition, for the ten days prior to the date of the annual meeting, the list will be available for examination by any stockholder of record for a legally valid purpose at our corporate headquarters during regular business hours.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. In addition, final voting results will be published in a Current Report on Form 8-K that we expect to file within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

ELECTION OF DIRECTORS

Our Board of Directors consists of six directors, five of whom are nominees for re-election as a director this year. On April 27, 2023, Peter Hoang informed the Board of his resignation as President and Chief Executive Officer, effective May 1, 2023, and Director, effective immediately. Also on April 27, 2023, David Laskow-Pooley informed the Board that he will not be standing for reelection at the Annual Meeting. Mr. Laskow-Pooley will continue to serve as director and as chair of the Audit Committee and chair of the Compensation Committee until the expiration of his current term at the conclusion of the Annual Meeting.

Each director to be elected and qualified will hold office until the next annual meeting of stockholders and until his or her successor is elected, or, if sooner, until the director's death, resignation or removal. Each of the nominees listed below is currently a director of the Company who was previously elected by the stockholders. See "Information Regarding the Board of Directors and Corporate Governance – Nominating and Corporate Governance Committee."

It is our policy to invite and encourage nominees for directors to attend the Annual Meeting. All eight of the directors then in office attended the 2022 Annual Meeting of Stockholders.

Directors are elected by a plurality of the votes of the holders of shares present at the virtual meeting or represented by proxy and entitled to vote on the election of directors. Accordingly, the five nominees receiving the highest number of affirmative votes will be elected. Shares represented by executed proxies will be voted, if authority to do so is not withheld, for the election of the eight nominees named below. If any nominee becomes unavailable for election as a result of an unexpected occurrence, shares that would have been voted for that nominee will instead be voted for the election of a substitute nominee that we propose. Each person nominated for election has agreed to serve if elected. We have no reason to believe that any nominee will be unable to serve.

NOMINEES

The following is a brief biography, as of the date of this proxy statement, of each nominee for director and a discussion of the specific experience, qualifications, attributes or skills of each nominee that led the Nominating and Corporate Governance Committee to recommend that person as a nominee for director, as of the date of this proxy statement.

The Nominating and Corporate Governance Committee seeks to assemble a board that, as a whole, possesses the appropriate balance of professional and industry knowledge, financial expertise and high-level management experience necessary to oversee and direct the Company's business. To that end, the Nominating and Corporate Governance Committee has identified and evaluated nominees in the broader context of the Board's overall composition, with the goal of recruiting members who complement and strengthen the skills of other members and who also exhibit integrity, collegiality, sound business judgment and other qualities that the Nominating and Corporate Governance Committee views as critical to effective functioning of the Board. To provide a mix of experience and perspective on the Board, the Committee also takes into account gender, age, and ethnic diversity.

The brief biographies below include information, as of April 28, 2023, regarding the specific and particular experience, qualifications, attributes or skills of each director or nominee that led the Nominating and Corporate Governance Committee to believe that that nominee should continue to serve on the Board. However, each of the members of the Nominating and Corporate Governance Committee may have a variety of reasons why he believes a particular person would be an appropriate nominee for the Board, and these views may differ from the views of other members.

David Eansor, age 62

Mr. Eansor joined the Board in October 2018 and became the chair of the Board following the Annual Meeting in 2022. Mr. Eansor served as the President of the Protein Sciences Segment of Bio-Techne Corporation from April 2018 until his retirement in March 2022. From 2014 to April 2018, Mr. Eansor served as Senior Vice President of Bio-Techne's Biotechnology Division, which he joined as result of Bio-Techne's acquisition of

Novus Biologicals. Mr. Eansor earned a B.S. in Chemistry from University of Western Ontario, as well as a Bachelor of Commerce in General Business and Economics and an M.B.A. from the University of Windsor, Ontario, Canada. The Board believes that Mr. Eansor's extensive experience in the life sciences manufacturing industry qualifies him to serve on the Board.

Steven Elms, age 59

Mr. Elms joined the Board in August 2019, and previously served as a non-voting board observer. Mr. Elms currently serves as Managing Partner at Aisling Capital, a life sciences investment firm, which he joined in 2000. Mr. Elms has served as chairman of the board of directors of ADMA Biologics, Inc. since 2007 and Elevation Oncology, Inc. since May 2019. He previously served as a member of the board of directors of Zosano Pharma Corp. from May 2018 to May 2022 and as a director of LOXO Oncology from 2013 to February 2019. Mr. Elms earned a B.A. in Human Biology from Stanford University and an M.B.A. from the Kellogg Graduate School of Management at Northwestern University. The Board believes that Mr. Elms' background in financial services and extensive experience in the pharmaceutical and healthcare industries qualify him to serve on the Board.

Katharine Knobil, age 59

Dr. Knobil joined the Board in December 2021. Dr. Knobil currently serves as Chief Medical Officer of Agilent Technologies Inc., a position she has held since April 2021. Dr. Knobil previously served as Chief Medical Officer and Head of Research & Development at Kaleido Biosciences, Inc. from December 2018 to January 2021. Previously, Dr. Knobil spent more than 20 years in roles of increasing responsibility at GlaxoSmithKline plc, most recently serving as the corporate Chief Medical Officer from 2017 to December 2018, and as Chief Medical Officer for Pharmaceuticals at GSK from 2015 to 2017. She served as a member of the board of directors of Arena Pharmaceuticals, Inc. from June 2020 until its acquisition by Pfizer Inc. in March 2022. Dr. Knobil received her B.A. from Cornell University, her M.D. from University of Texas Southwestern Medical School, and completed a Fellowship in Pulmonary and Critical Care Medicine at the Johns Hopkins Medical School. The Board believes that Dr. Knobil's years of leadership experience in the pharmaceutical and healthcare industry and her medical degree qualify her to serve on the Board.

Juan Vera, M.D., age 43

Dr. Vera will begin service as our President and Chief Executive Officer effective May 1, 2023. He joined the Board in October 2018 and previously served as our Chief Operating Officer from November 2021 to April 2023 and previously served as our Chief Scientific Officer from October 2018 to April 2023. Dr. Vera is a co-inventor of the multi-tumor associated antigen technology and co-founder of our predecessor, Marker Cell Therapy, Inc. Dr. Vera has held various positions at the Center for Cell and Gene Therapy at Baylor College of Medicine, most recently as an Associate Professor from 2015 to present. Dr. Vera is also a co-founder of AlloVir, Inc. where he has served as a member of the board of directors since 2014 and previously served as its Chief Product Development Officer from 2014 to June 2020. Dr. Vera received the Idea Development Award from the Department of Defense and Mentored Research Scholar Award from the American Cancer Society. Dr. Vera earned an M.D. from the University El Bosque in Bogota, Colombia. The Board believes that Dr. Vera's extensive scientific and medical experience, including as the co-inventor of the multi-tumor associated antigen technology, qualifies him to serve on the Board.

John Wilson, age 63

Mr. Wilson joined the Board in October 2018. Mr. Wilson is a co-inventor of the multi-tumor associated antigen technology and co-founder of our predecessor, Marker Cell Therapy, Inc. Since 1996, he has been the Chief Executive Officer of Wilson Wolf Manufacturing Corporation. He is also a co-founder of AlloVir, Inc. and served as its Managing Director from 2013 to 2018. He previously served on the board of directors of AlloVir from 2018 to May 2022. Mr. Wilson earned a B.A. in Business Administration and a B.A in Economics from Hamline University and a B.S. in Mechanical Engineering from the University of Minnesota. The Board believes that Mr. Wilson's extensive scientific and manufacturing experience qualifies him to serve on the Board.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF EACH NAMED NOMINEE.

Mr. Hoang, who has served as a member of our Board since 2017, resigned from the Board effective April 27, 2023. Mr. Laskow-Pooley, who has served as a member of our Board since 2015, is not standing for reelection at the Annual Meeting. The Board thanks Messrs. Hoang and Laskow-Pooley for their years of service and significant contributions to the Company and wishes them luck in their future endeavors.

Peter Hoang, age 51

Mr. Hoang served as a member of our Board, from September 2017 until April 2023. On April 27, 2023, Mr. Hoang also announced his resignation as our President and Chief Executive Officer, effective May 1, 2023, a position he had held since September 2017. Mr. Hoang previously served as Senior Vice President of Business Development and Strategy at Bellicum Pharmaceuticals from 2014 to 2017 and as the Managing Director of Innovations at The University of Texas MD Anderson Cancer Center from 2012 to 2014. Mr. Hoang earned a B.A. from Yale University and an M.B.A. from the Anderson School of Management at the University of California, Los Angeles.

David Laskow-Pooley, age 68

Mr. Laskow-Pooley joined the Board in March 2015. He co-founded Pharmafor Ltd., an incubator for pharmaceutical and medical technology companies, in 2009. Mr. Laskow-Pooley served as Chief Executive Officer of LondonPharma Ltd from 2012 to 2017. He has served as a director of Abliva AB (f/k/a NeuroVive Pharmaceutical AB) since 2016, and as the chairman since 2017. Mr. Laskow-Pooley earned a B.Sc. in Pharmacy from the Sunderland School of Pharmacy. The Board believes that Mr. Laskow-Pooley's extensive international experience in the pharmaceutical industry, including on the launches of drugs and medical devices, qualifies him to serve on the Board.

BOARD DIVERSITY MATRIX

The following chart summarizes certain self-identified personal characteristics of our six directors serving on the Board as of April 28, 2023, in accordance with Nasdaq listing Rule 5605(f). Each term used in the table has the definition provided in the rule and related instructions.

Board Diversity Matrix (as of April 28, 2023)					
otal Number of Directors 6					
	Female	Male			
Part I: Gender Identity					
Directors	1	5			
Part II: Demographic Background					
Asian	_	_			
Hispanic or Latinx	_	1			
White	1	3			
Two or More Races or Ethnicities	_	1			

Our Board Diversity Matrix as of April 1, 2022 can be found in our proxy statement for the 2022 Annual Meeting filed with the SEC on April 15, 2022.

INFORMATION REGARDING THE BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

INDEPENDENCE OF THE BOARD OF DIRECTORS

As required under the Nasdaq Stock Market ("Nasdaq") listing standards, a majority of the members of a listed company's Board of Directors must qualify as "independent," as affirmatively determined by the Board of Directors. The Board consults with the Company's counsel to ensure that the Board's determinations are consistent with relevant securities and other laws and regulations regarding the definition of "independent," including those set forth in pertinent listing standards of Nasdaq, as in effect from time to time.

Consistent with these considerations, after review of all relevant identified transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent auditors, the Board has affirmatively determined that the following three directors who are standing for re-election at the Annual Meeting are independent directors within the meaning of the applicable Nasdaq listing standards: David Eansor, Steven Elms, and Katharine Knobil.. In making this determination, the Board found that none of these directors or nominees for director had a material or other disqualifying relationship with the Company.

BOARD LEADERSHIP STRUCTURE

The Board of Directors of the Company has an independent chair, currently Mr. Eansor. The Board Chair has authority, among other things, to call and preside over Board meetings and to set meeting agendas. Accordingly, the Board Chair has substantial ability to shape the work of the Board. The Company believes that separation of the positions of Board Chair and Chief Executive Officer reinforces the independence of the Board in its oversight of the business and affairs of the Company. In addition, the Company believes that having an independent Board Chair creates an environment that is more conducive to objective evaluation and oversight of management's performance, increasing management accountability and improving the ability of the Board to monitor whether management's actions are in the best interests of the Company and its stockholders. As a result, the Company believes that having an independent Board Chair can enhance the effectiveness of the Board as a whole.

ROLE OF THE BOARD IN RISK OVERSIGHT

One of the Board's key functions is informed oversight of the Company's risk management process. The Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various Board standing committees that address risks inherent in their respective areas of oversight. In particular, our Board is responsible for monitoring and assessing strategic risk exposure, including a determination of the nature and level of risk appropriate for the Company. Our Audit Committee has the responsibility to consider and discuss our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. The Audit Committee also monitors compliance with legal and regulatory requirements, in addition to oversight of the performance of our internal audit function. Audit Committee responsibilities also include oversight of information security risk management. Our Nominating and Corporate Governance Committee monitors the effectiveness of our corporate governance guidelines, including whether they are successful in preventing illegal or improper liability-creating conduct. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking. Typically, the Board committees meet at least annually with the employees responsible for risk management in the committees' respective areas of oversight. Both the Board as a whole and the various standing committees receive periodic risk assessment reports from management, as well as incidental reports as matters may arise. It is the responsibility of the committee chairs to report findings regarding material risk exposures to the Board as quickly as possible.

MEETINGS OF THE BOARD OF DIRECTORS

The Board of Directors met eight times during the last fiscal year. Each director attended 75% or more of the aggregate number of meetings of the Board and of the committees on which he served held during the portion of the last fiscal year for which he was a director or committee member.

INFORMATION REGARDING COMMITTEES OF THE BOARD OF DIRECTORS

The Board has three committees: an Audit Committee, a Compensation Committee and a Nominating and Corporate Governance Committee. The following table provides membership and meeting information for fiscal 2022 for each of the Board committees:

Name	Audit	Compensation	Nominating and Corporate Governance
David Eansor	X	X	X
Steven Elms	X	X	
Peter Hoang**			
Katharine Knobil		X	X*
David Laskow-Pooley***	X*	X*	
Juan Vera			
John Wilson			
Total meetings in fiscal 2022	5	4	3

- * Committee Chairperson
- ** Mr. Hoang resigned from the Board effective April 27, 2023.

Below is a description of each committee of the Board of Directors. Each of the committees has authority to engage legal counsel or other experts or consultants, as it deems appropriate to carry out its responsibilities. The Board of Directors has determined that each member of each committee meets the applicable Nasdaq rules and regulations regarding "independence" and each member is free of any relationship that would impair his or her individual exercise of independent judgment with regard to the Company.

Audit Committee

The Audit Committee of the Board of Directors (the "Audit Committee") was established by the Board in accordance with Section 3(a)(58)(A) of the Exchange Act to oversee the Company's corporate accounting and financial reporting processes and audits of its financial statements. For this purpose, the Audit Committee performs several functions. The Audit Committee evaluates the performance of and assesses the qualifications of the independent auditors; determines and approves the engagement of the independent auditors; determines whether to retain or terminate the existing independent auditors or to appoint and engage new independent auditors; reviews and approves the retention of the independent auditors to perform any proposed permissible non-audit services; monitors the rotation of partners of the independent auditors on the Company's audit engagement team as required by law; reviews and approves or rejects transactions between the company and any related persons; confers with management and the independent auditors regarding the effectiveness of internal control over financial reporting; establishes procedures, as required under applicable law, for the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and the confidential and anonymous submission by employees of concerns regarding questionable accounting or auditing matters; and meets to review the Company's annual audited financial statements and quarterly financial statements with management and the independent auditor, including a review of the Company's disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations."

The Audit Committee currently is composed of three directors: David Laskow-Pooley (until the expiration of his term at the conclusion of the Annual Meeting), David Eansor and Steven Elms, with Mr. Laskow-Pooley serving as chairman. The Board intends to appoint Katharine Knobil to serve on the Audit Committee and David Eansor to serve as chairman of the Audit Committee following the expiration of Mr. Laskow-Pooley's term at the conclusion of the Annual Meeting. The Audit Committee met five times during fiscal 2022. The

^{***} Following the expiration of his term as a director at the conclusion of the Annual Meeting, Mr. Laskow-Pooley will no longer serve on any committee of the Board.

Board has adopted a written Audit Committee charter that is available to stockholders on our website at https://www.markertherapeutics.com.

The Board of Directors reviews the Nasdaq listing standards definition of independence for Audit Committee members on an annual basis and has determined that all members of the Company's Audit Committee are independent (as independence is currently defined in Rule 5605(c)(2)(A)(i) and (ii) of the Nasdaq listing). The Board of Directors has also determined that Mr. Eansor qualifies as an "audit committee financial expert," as defined in applicable SEC rules.

Report of the Audit Committee of the Board of Directors*

The Audit Committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2022 with management of the Company. The Audit Committee has discussed with the independent registered public accounting firm the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the SEC. The Audit Committee has also received the written disclosures and the letter from the independent registered public accounting firm required by applicable requirements of the PCAOB regarding the independent accountants' communications with the audit committee concerning independence, and has discussed with the independent registered public accounting firm the accounting firm's independence. Based on the foregoing, the Audit Committee has recommended to the Board of Directors that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2022.

David Laskow-Pooley, Chair Steven Elms David Eansor

*The material in this report is not "soliciting material," is not deemed "filed" with the Commission and is not to be incorporated by reference in any filing of the Company under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.

Compensation Committee

The Compensation Committee of the Board of Directors (the "Compensation Committee") acts on behalf of the Board to review and oversee the Company's compensation strategy, policies, plans and programs, including:

- establishment of corporate and individual performance objectives relevant to the compensation of the Company's executive officers, directors and other senior management and evaluation of performance in light of these stated objectives;
- annual review and approval of the individual elements of total compensation and other terms of
 employment or service, including severance and change-in-control arrangements, of the Company's
 executive officers, other than the Chief Executive Officer;
- annual review of, and recommendation to the Board for approval, the individual elements of total compensation and other terms of employment or service, including severance and change-in-control arrangements, of the Chief Executive Officer; and
- administration of the Company's equity compensation and other benefit plans.

The Compensation Committee currently is composed of four directors: David Laskow-Pooley (until the expiration of his term at the conclusion of the Annual Meeting), David Eansor, Steven Elms and Katharine Knobil, with Mr. Laskow-Pooley serving as chairman. The Board intends to appoint David Eansor to serve as chairman of the Compensation Committee following the expiration of Mr. Laskow-Pooley's term at the conclusion of the Annual Meeting. All current members of the Company's Compensation Committee are independent (as independence is currently defined in Rule 5605(d)(2) of the Nasdaq listing standards. The Compensation Committee met four times during fiscal 2022. The Board has adopted a written Compensation Committee charter that is available to stockholders on our website at https://www.markertherapeutics.com.

Typically, the Compensation Committee meets at least quarterly and with greater frequency if necessary. The agenda for each meeting is usually developed by the chair of the Compensation Committee, in consultation with the Chief Executive Officer and Radford, the compensation consultant engaged by the Compensation Committee. The Compensation Committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice or to otherwise participate in Compensation Committee meetings. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities and personnel of the Company. In addition, under the charter, the Compensation Committee has the authority to obtain, at the expense of the Company, advice and assistance from compensation consultants and internal and external legal, accounting or other advisors and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. The Compensation Committee has direct responsibility for the oversight of the work of any consultants or advisers engaged for the purpose of advising the Committee. In particular, the Compensation Committee has the sole authority to retain, in its sole discretion, compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms. Under the charter, the Compensation Committee may select, or receive advice from, a compensation consultant, legal counsel or other adviser to the compensation committee, other than in-house legal counsel and certain other types of advisers, only after taking into consideration six factors, prescribed by the SEC and Nasdaq, that bear upon the adviser's independence; however, there is no requirement that any adviser be independent. In 2022, after taking into consideration the six factors prescribed by the SEC and Nasdaq described above, the Compensation Committee engaged Radford as its compensation consultant. See "Executive Compensation - Summary Compensation Table -Narrative to Summary Compensation Table - Role of the Compensation Committee and Executive Officers in Setting Executive Compensation."

Under its charter, the Compensation Committee may form, and delegate authority to, subcommittees as appropriate. The Compensation Committee has formed a Non-Officer Stock Option Subcommittee, composed of Peter Hoang, during his service as our President and Chief Executive Officer to which it has delegated authority to grant, without any further action required by the Compensation Committee, stock options to employees who are not officers of the Company. The purpose of this delegation of authority is to enhance the flexibility of option administration within the Company and to facilitate the timely grant of options to non-management employees, particularly new employees, within specified limits approved by the Compensation Committee. Typically, as part of its oversight function, the Compensation Committee will review on a quarterly basis the list of grants made by the subcommittee. During fiscal 2022, the subcommittee exercised its authority to grant options to purchase an aggregate of 95,000 shares to non-officer employees. The Compensation Committee will consider delegating such authority to Juan Vera as our new President and Chief Executive Officer in the future.

Nominating and Corporate Governance Committee

The Nominating and Corporate Governance Committee of the Board of Directors (the "Nominating and Corporate Governance Committee") is responsible for identifying, reviewing and evaluating candidates to serve as directors of the Company (consistent with criteria approved by the Board), reviewing and evaluating incumbent directors, recommending to the Board for selection candidates for election to the Board of Directors, making recommendations to the Board regarding the membership of the committees of the Board, assessing the performance of management and the Board, and developing a set of corporate governance principles for the Company.

The Nominating and Corporate Governance Committee currently is composed of two directors: Katharine Knobil and David Eansor, with Ms. Knobil serving as chairperson. All members of the Nominating and Corporate Governance Committee are independent (as independence is currently defined in Rule 5605(a)(2) of the Nasdaq listing standards). The Nominating and Corporate Governance Committee met three times during fiscal 2022. The Board has adopted a written Nominating and Corporate Governance Committee charter that is available to stockholders on the Company's website and https://www.markertherapeutics.com.

The Nominating and Corporate Governance Committee believes that candidates for director should have certain minimum qualifications, including the ability to read and understand basic financial statements, being

over 21 years of age and having the highest personal integrity and ethics. The Nominating and Corporate Governance Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of the Company, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of the Company's stockholders.

However, the Nominating and Corporate Governance Committee retains the right to modify these qualifications from time to time. Board diversity and inclusion is critical to the Company's success. Candidates for director nominees are reviewed in the context of the current composition of the Board, the operating requirements of the Company and the long-term interests of stockholders. In conducting this assessment, the Nominating and Corporate Governance Committee typically considers diversity (including gender, racial and ethnic diversity), age, skills and such other factors as it deems appropriate, given the current needs of the Board and the Company, to maintain a balance of knowledge, experience and capability. As presently constituted, the Board represents a deliberate mix of members who have a deep understanding of the Company's business, as well as members who have different skill sets and points of view on substantive matters pertaining to our business. Our nomination process and our Board's approach to assessment and evaluation of our nominees support our continued commitment to diversity and inclusion.

The Nominating and Corporate Governance Committee appreciates the value of thoughtful Board refreshment, and regularly identifies and considers qualities, skills and other director attributes that would enhance the composition of the Board. In the case of incumbent directors whose terms of office are set to expire, the Nominating and Corporate Governance Committee reviews these directors' overall service to the Company during their terms, including the number of meetings attended, level of participation, quality of performance and any other relationships and transactions that might impair the directors' independence. The Committee also takes into account the results of the Board's self-evaluation, conducted annually on a group and individual basis. In the case of new director candidates, the Nominating and Corporate Governance Committee also determines whether the nominee is independent for Nasdaq purposes, which determination is based upon applicable Nasdaq listing standards, applicable SEC rules and regulations and the advice of counsel, if necessary. The Nominating and Corporate Governance Committee then uses its network of contacts to compile a list of potential candidates, but may also engage, if it deems appropriate, a professional search firm. The Nominating and Corporate Governance Committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the Board. The Nominating and Corporate Governance Committee meets to discuss and consider the candidates' qualifications and then selects a nominee for recommendation to the Board by majority vote.

The Company previously granted board observer rights to Aisling Capital, pursuant to which Mr. Elms was designated as a board observer prior to being appointed as a director, and New Enterprise Associates 16, L.P. ("NEA"), pursuant to which NEA may designate either a board observer or a director until a change of control transaction occurs or NEA ceases to own at least 250,000 shares (as adjusted for the ten-for-one (10:1) reverse stock split we completed on January 26, 2023 (the "Reverse Stock Split")) of the Company's common stock. NEA has currently designated a non-voting board observer.

The Nominating and Corporate Governance Committee will consider director candidates recommended by stockholders. The Nominating and Corporate Governance Committee does not intend to alter the manner in which it evaluates candidates, including the minimum criteria set forth above, based on whether or not the candidate was recommended by a stockholder. Stockholders who wish to recommend individuals for consideration by the Nominating and Corporate Governance Committee to become nominees for election to the Board may do so by delivering a written recommendation to the Nominating and Corporate Governance Committee at the following address: Marker Therapeutics, Inc., Attention: Secretary, 4551 Kennedy Commerce Drive, Houston, Texas 77032, at least 90 days, but not more than 120 days prior to the anniversary date of the preceding year's annual meeting of stockholders. Submissions must include (1) all information related to such nominee that would be required to be disclosed in solicitations of proxies for the election of such nominee as a director pursuant to Regulation 14A under the Exchange Act, including such person's written consent to being named in the proxy statement as a nominee and serving as a director, if elected, and (2) a description of all direct and indirect compensation and other material monetary arrangements, agreements or understandings during the past three years, and any other material relationship, if any, between or concerning the nominating stockholder and his, her or its affiliates, on the one hand, and the proposed

nominee or any of his or her affiliates, on the other hand. We may require any proposed nominee to furnish other information as we may reasonably require to determine the eligibility of the proposed nominee to serve as an independent director or that could be material to a reasonable stockholder's understanding of the independence, or lack of independence, of the proposed nominee.

STOCKHOLDER COMMUNICATIONS WITH THE BOARD OF DIRECTORS

The Company's Board has adopted a formal process by which stockholders may communicate with the Board or any of its directors. Stockholders who wish to communicate with the Board may do so by sending written communications addressed to the Secretary of the Company Secretary, 4551 Kennedy Commerce Drive, Houston, Texas 77032. All communications will be compiled by the Secretary of the Company and submitted to the Board or the individual directors on a periodic basis.

CODE OF ETHICS

The Company has adopted a Code of Business Conduct and Ethics that applies to all officers, directors and employees, including our principal executive officer, principal financial officer, principal accounting officer or persons performing similar functions. The Code of Business Conduct and Ethics is available on our website at https://www.markertherapeutics.com. If the Company makes any substantive amendments to the Code of Business Conduct and Ethics or grants any waiver from a provision of the Code of Business Conduct and Ethics to any executive officer or director, the Company will promptly disclose the nature of the amendment or waiver on its website.

CORPORATE GOVERNANCE GUIDELINES

In 2020, the Board of Directors documented the governance practices followed by the Company by adopting Corporate Governance Guidelines to assure that the Board will have the necessary authority and practices in place to review and evaluate the Company's business operations as needed and to make decisions that are independent of the Company's management. The guidelines are also intended to align the interests of directors and management with those of the Company's stockholders. The Corporate Governance Guidelines set forth the practices the Board intends to follow with respect to board composition and selection, including diversity, board meetings and involvement of senior management, Chief Executive Officer performance evaluation and succession planning, and board committees and compensation. The Corporate Governance Guidelines, as well as the charters for each committee of the Board, may be viewed on our website at https://www.markertherapeutics.com.

HEDGING POLICY

The Company's insider trading policy prohibits all employees, including our executive officers, and non-employee directors from engaging in short sales, transactions in put or call options, hedging transactions, using margin accounts, pledges, or other inherently speculative transactions involving the Company's securities.

ADVISORY VOTE ON EXECUTIVE COMPENSATION

The Board has adopted a policy of soliciting a non-binding advisory vote on the compensation of the named executive officers, commonly referred to as a "say-on-pay vote," every year. In accordance with that policy, this year, the Company is again asking the stockholders to approve, on an advisory basis, the compensation of the Company's named executive officers as disclosed in this proxy statement in accordance with SEC rules.

This vote is not intended to address any specific item of compensation, but rather the overall compensation of the Company's named executive officers and the philosophy, policies and practices described in this proxy statement. The compensation of the Company's named executive officers subject to the vote is disclosed in the compensation tables and the related narrative disclosure contained in this proxy statement. As discussed in those disclosures, the Company believes that its compensation policies and decisions are strongly aligned with our stockholders' interests and consistent with current market practices for similarly situated companies. Compensation of the Company's named executive officers is designed to enable the Company to attract and retain talented and experienced executives to lead the Company successfully in a competitive environment.

Accordingly, the Board is asking the stockholders to indicate their support for the compensation of the Company's named executive officers as described in this proxy statement by casting a non-binding advisory vote "FOR" the following resolution:

"RESOLVED, that the compensation paid to the Company's named executive officers, as disclosed pursuant to Item 402 of Regulation S-K, including compensation tables and narrative discussion, is hereby APPROVED."

Because the vote is advisory, it is not binding on the Board of Directors or the Company. Nevertheless, the views expressed by the stockholders, whether through this vote or otherwise, are important to management and the Board and, accordingly, the Board and the Compensation Committee intend to consider the results of this vote in making determinations in the future regarding executive compensation arrangements.

Advisory approval of this proposal requires the vote of the holders of a majority of the shares online at the virtual meeting or represented by proxy and entitled to vote on the matter at the annual meeting. The next scheduled say-on-pay vote will be determined by our Board and will depend, in part, on the outcome of the vote on Proposal 3, which is the advisory vote regarding the frequency of soliciting future shareholder advisory votes on the compensation of the Company's named executive officers.

THE BOARD OF DIRECTORS RECOMMENDS
A VOTE IN FAVOR OF PROPOSAL 2.

ADVISORY VOTE ON THE FREQUENCY OF SOLICITATION OF ADVISORY SHAREHOLDER APPROVAL OF EXECUTIVE COMPENSATION

The Dodd-Frank Wall Street Reform and Consumer Protection Act, and Section 14A of the Exchange Act enable the Company's shareholders, at least once every six years, to indicate their preference regarding how frequently the Company should solicit a say-on-pay vote. Currently, consistent with the preference expressed by the shareholders at the Company's 2017 Annual Meeting of Shareholders, the policy of the Board is to solicit a say-on-pay vote every year. The Company is again asking shareholders to indicate whether they would prefer an advisory vote every year, every other year or every three years. Alternatively, shareholders may abstain from casting a vote. For the reasons described below, the Board recommends that the shareholders select a frequency of one year.

After considering the benefits and consequences of each alternative, the Board recommends that the advisory vote on the compensation of the Company's named executive officers be submitted to the shareholders once every year.

The Board believes that an annual advisory vote on the compensation of the Company's named executive officers will allow our stockholders to provide timely and direct input on the Company's executive compensation philosophy, policies and practices as disclosed in the proxy statement each year. Accordingly, the Board is asking shareholders to indicate their preferred voting frequency by voting for one, two or three years or abstaining from voting on this proposal. The alternative among one year, two years or three years that receives the votes of the holders of a majority of the shares online at the virtual meeting or represented by proxy and entitled to vote on the matter at the annual meeting will be deemed to be the frequency preferred by the shareholders and will be the alternative selected in the following resolution to be submitted to the shareholders for a vote at the annual meeting:

"RESOLVED, that the frequency of every [one year][two years][three years] is hereby APPROVED as the frequency preferred by shareholders for the solicitation of advisory shareholder approval of the compensation paid to the Company's named executive officers."

While the Board believes that its recommendation is appropriate at this time, the shareholders are not voting to approve or disapprove that recommendation, but are instead asked to indicate their preferences, on an advisory basis, as to whether the non-binding advisory vote on the approval of the Company's executive officer compensation practices should be held every year, every other year or every three years. The option among those choices that receives the votes of the holders of a majority of shares present virtually or represented by proxy and entitled to vote at the annual meeting will be deemed to be the frequency preferred by the shareholders.

The Board and the Compensation Committee value the opinions of the shareholders in this matter and, to the extent there is any significant vote in favor of one frequency over the other options, even if less than a majority, the Board will consider the shareholders' concerns and evaluate any appropriate next steps. However, because this vote is advisory and, therefore, not binding on the Board of Directors or the Company, the Board may decide that it is in the best interests of the shareholders that the Company hold an advisory vote on executive compensation more or less frequently than the option preferred by the shareholders. The vote will not be construed to create or imply any change or addition to the fiduciary duties of the Company or the Board.

THE BOARD OF DIRECTORS RECOMMENDS

A VOTE IN FAVOR OF "ONE YEAR" ON PROPOSAL 3.

RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of the Board of Directors has selected Marcum LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2023 and has further directed that management submit the selection of its independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. Marcum LLP has audited the Company's financial statements since 2014. Representatives of Marcum LLP are expected to be present online at the Annual Meeting. They will have an opportunity to make a statement if they so desire and will be available to respond to appropriate questions.

Neither the Company's Bylaws nor other governing documents or law require stockholder ratification of the selection of Marcum LLP as the Company's independent registered public accounting firm. However, the Audit Committee of the Board is submitting the selection of Marcum LLP to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the Audit Committee of the Board will reconsider whether or not to retain that firm. Even if the selection is ratified, the Audit Committee of the Board in its discretion may direct the appointment of different independent auditors at any time during the year if they determine that such a change would be in the best interests of the Company and its stockholders.

The affirmative vote of the holders of a majority of the shares online at the virtual meeting or represented by proxy and entitled to vote on the matter at the Annual Meeting will be required to ratify the selection of Marcum LLP.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table represents aggregate fees billed to the Company for the years ended December 31, 2022 and 2021 by Marcum LLP, the Company's principal accountant.

		Ended iber 31,
	2022	2021
Audit Fees ⁽¹⁾	\$322,000	\$238,000
Total Fees	\$322,000	\$238,000

⁽¹⁾ Audit fees consist of the aggregate fees billed for professional services rendered by our independent auditors for the audit of our annual financial statements, the review of the financial statements, including internal control attestations, included in each of our quarterly reports and services provided in connection with statutory and regulatory filings or engagements.

All fees described above were pre-approved by the Audit Committee.

PRE-APPROVAL POLICIES AND PROCEDURES

The Audit Committee pre-approves all audit and non-audit services rendered by the Company's independent registered public accounting firm, Marcum LLP.

The Audit Committee has determined that the rendering of services other than audit services by Marcum LLP is compatible with maintaining the principal accountant's independence.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE IN FAVOR OF PROPOSAL 4.

EXECUTIVE OFFICERS

Our executive officers, and their respective ages as of the management transition effective May 1, 2023, are as follows:

Name	Age	Position(s)
Juan Vera, M.D.	43	President, Chief Executive Officer, and Director
Michael Loiacono	57	Chief Accounting Officer
Nadia Agopyan, Ph.D.	61	Vice President, Regulatory Affairs
Tsvetelina Hoang, Ph.D.	50	Vice President, Research & Development
Anna Szymanska	49	Vice President, Quality

The biography of Juan Vera is set forth in "Proposal 1: Election of Directors" above.

Michael Loiacono has served as our Chief Accounting Officer, Secretary and Treasurer since 2016. Mr. Loiacono also previously served as our Chief Financial Officer from 2016 until November 2018 when the roles of Chief Accounting Officer and Chief Financial Officer of the Company were separated. Mr. Loiacono previously was responsible for strategic development at FTCI, Inc. from 2013 to August 2016. Mr. Loiacono earned a B.S. from Rutgers University.

Nadia Agopyan, Ph.D. has served as our Vice President of Regulatory Affairs since August 2019. Ms. Agopyan previously served as Director of Regulatory Affairs of Kite Pharma, a subsidiary of Gilead Sciences, from 2015 to August 2019. She also served as Global Regulatory Lead at Baxter Biosciences from 2012 to 2015. Ms. Agopyan earned a B.Sc. and a Ph.D. in Neurophysiology from McGill University.

Tsvetelina P. Hoang, Ph.D. has served as our Vice President of Research and Development since July 2018. She previously served in positions of increasing responsibility at Bellicum Pharmaceuticals, Inc. from 2015 to July 2018, including as Senior Scientist and most recently as Director of Translational Research. Previously, she was a member of the faculty at The University of Texas MD Anderson Cancer Center from 2013 to 2015. Ms. Hoang earned a combined B.S./M.S. in Molecular Biophysics and Biochemistry from Yale University and a Ph.D. in Biology from Johns Hopkins University.

Anna Szymanska has served as our Vice President of Quality since December 2019. She previously served as our Senior Director of Quality from April 2019 to December 2019. Prior to joining our Company, Ms. Szymanska served as Director of Quality Control for Bellicum Pharmaceuticals, Inc. from 2016 to March 2019. She also served as Quality Validation Specialists and Project Manager of Opexa Therapeutics, Inc. from 2015 to 2016 and in roles of increasing responsibility at Woodfield Pharmaceutical, LLC (formerly Pernix Manufacturing, LLC) from 2008 to 2015, most recently as Director of Microbiology. Ms. Szymanska earned an M.S. in Microbiology from the University of Warsaw.

Management Transition

On April 27, 2023, Peter Hoang resigned from our Board of Directors, effective immediately, and as our President and Chief Executive Officer, effective May 1, 2023. The Board appointed Juan Vera to serve as our President and Chief Executive Officer, effective May 1, 2023. The biography of Peter Hoang is set forth in "Proposal 1: Election of Directors" above.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the ownership of the Company's common stock as of March 31, 2023 by: (i) each director and nominee for director; (ii) each named executive officer; (iii) all executive officers and directors of the Company as a group; and (iv) all those known by the Company to be beneficial owners of more than five percent of its common stock. Beneficial ownership, for purposes of this table, includes options and warrants to purchase common stock that are either currently exercisable or will be exercisable within 60 days of March 31, 2023.

	Beneficial Ownership ⁽¹⁾			
Beneficial Owner	Number of Shares	Percent of Total		
5% or greater stockholders:				
New Enterprise Associates ⁽²⁾	1,446,428	15.8%		
Aisling Capital IV LP ⁽³⁾	464,285	5.2%		
Named executive officers and directors:				
Peter Hoang ⁽⁴⁾	240,922	2.7%		
Anthony Kim	_	_		
Mythili Koneru ⁽⁵⁾	58,221	*		
David Eansor ⁽⁶⁾	12,944	*		
Steven Elms ⁽⁷⁾	476,503	5.3%		
David Laskow-Pooley ⁽⁸⁾	14,772	*		
Juan Vera ⁽⁹⁾	405,580	4.5%		
John Wilson ⁽¹⁰⁾	1,010,244	11.2%		
Katharine Knobil ⁽¹¹⁾	14,049	*		
All executive officers and directors as a group (12 persons) ⁽¹²⁾	2,337,283	24.1%		

^{*} Represents beneficial ownership of less than 1%.

- (1) This table is based upon information supplied by officers, directors and principal stockholders and Schedules 13D and 13G filed with the SEC and takes into account the impacts of the Reverse Stock Split. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, the Company believes that each of the stockholders named in this table has sole voting and investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 8,798,829 shares outstanding on March 31, 2023, adjusted as required by rules promulgated by the SEC.
- (2) This information has been obtained from a Schedule 13D/A filed on filed on March 26, 2021 with the SEC by New Enterprise Associates 16, L.P. ("NEA 16") and its affiliates, except as has been adjusted to account for the Reverse Stock Split. Consists of (a) 1,071,428 shares of common stock held directly by NEA 16 and (b) 375,000 shares of common stock issuable upon the exercise of warrants held directly by NEA 16. NEA Partners 16, L.P. ("NEA Partners 16") is the sole general partner of NEA 16, and NEA 16 GP, LLC ("NEA 16 LLC") is the sole general partner of NEA Partner 16. The mangers of NEA 16 LLC are Peter J. Barris, Forest Baskett, Ali Behbahani, Carmen Chang, Anthony A. Florence, Jr., Mohamad H. Makhzoumi, Joshua Makower, David M. Mott, Scott D. Sandell, Peter W. Sonsini, Ravi Viswanathan and Paul Walker (collectively, the "NEA 16 Managers"). NEA 16, NEA Partners 16, NEA 16 LLC and the NEA 16 Managers share voting and dispositive power with regard to the shares owned directly by NEA 16. The principal business address for all entities and individuals affiliated with NEA 16 is New Enterprise Associates, 1954 Greenspring Drive, Suite 600, Timonium, MD 21093.
- (3) This information has been obtained from a Schedule 13D filed on March 3, 2023 with the SEC by Aisling Capital IV, LP ("Aisling") and its affiliates. Consists of (a) 314,285 shares of common stock held directly by Aisling and (b) 150,000 shares of common stock issuable upon exercise of warrants held directly by Aisling. Aisling Capital Partners IV, LP, ("Aisling LP") is the general partner of Aisling and Aisling

Capital Partners IV LLC, ("Aisling LLC") is the general partner of Aisling LLC. Steven Elms, a member of the Company's board of directors, and Mr. Andrew Schiff are the managing members of Aisling LLC (together, the "Managing Members"). Aisling, Aisling LP, Aisling LLC and the Managing Members share voting and dispositive power with regard to the shares owned directly by Aisling. The principal business address for all entities and individuals affiliated with Aisling is Aisling Capital, 888 Seventh Avenue, 12th Floor, New York, NY 10106.

- (4) Consists of (a) 33,256 shares of common stock and (b) 207,666 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023. Peter Hoang resigned as President and Chief Executive Officer, effective May 1, 2023, and Director, effective April 27, 2023.
- (5) Consists of 58,221 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023. Mythili Koneru resigned as Chief Medical Officer effective April 9, 2023.
- (6) Consists of (a) 3,694 shares of common stock and (b) 9,250 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023.
- (7) Consists of (a) 2,968 shares of common stock held directly by Mr. Elms, (b) 314,285 shares of common stock held directly by Aisling as described above in footnote 3, (c) 150,000 shares of common stock issuable upon exercise of warrants held directly by Aisling as described above in footnote 3 and (d) 9,250 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023.
- (8) Consists of (a) 5,522 shares of common stock and (b) 9,250 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023.
- (9) Consists of (a) 256,448 shares of common stock, (b) 72,278 shares of common stock issuable upon exercise of warrants within 60 days of March 31, 2023 and (c) 76,854 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023.
- (10) Consists of (a) 781,200 shares of common stock, (b) 219,794 shares of common stock issuable upon exercise of warrants within 60 days of March 31, 2021 and (c) 9,250 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023.
- (11) Consists of (a) 150 shares of common stock and (b) 13,899 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023.
- (12) Consists of (a) 1,430,779 shares of common stock, (b) 442,072 shares of common stock issuable upon exercise of warrants within 60 days of March 31, 2023 and (c) 464,432 shares of common stock issuable upon exercise of options within 60 days of March 31, 2023.

DELINQUENT SECTION 16(A) REPORTS

Section 16(a) of the Exchange Act requires the Company's directors and executive officers, and persons who own more than ten percent of a registered class of the Company's equity securities, to file with the SEC initial reports of ownership and reports of changes in ownership of common stock and other equity securities of the Company. Officers, directors and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms they file.

To the Company's knowledge, based solely on a review of the copies of such reports furnished to the Company and written representations that no other reports were required, during the fiscal year ended December 31, 2022, all Section 16(a) filing requirements applicable to its officers, directors and greater than ten percent beneficial owners were complied with.

EXECUTIVE COMPENSATION

We are currently a smaller reporting company and have elected to be subject to the scaled reporting rules applicable to smaller reporting companies. The following section describes, under the scaled reporting rules applicable to smaller reporting companies, the compensation we paid to our "named executive officers" for the fiscal years ended December 31, 2022 and 2021. Our named executive officers for the fiscal year ended December 31, 2022 are as follows:

- Peter Hoang, our Former President and Chief Executive Officer, who has resigned from that role
 effective May 1, 2023;
- Juan Vera, our President and Chief Executive Officer, effective May 1, 2023, who served as our Chief Scientific Officer and Chief Operating Officer during the fiscal year ended December 31, 2022:
- · Mythili Koneru, our former Chief Medical Officer; and
- · Anthony Kim, our former Chief Financial Officer.

SUMMARY COMPENSATION TABLE

The following table sets forth information regarding compensation awarded to, earned by and paid to our named executive officers with respect to the years ended December 31, 2022 and 2021, respectively.

Name and Principal Position	Year	Salary (\$)	Option Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$)	Total (\$)
Peter Hoang ⁽²⁾						
Former President	2022	424,270	141,900	_	_	566,170
and Chief Executive Officer	2021	424,089	1,001,900	193,043(3)	_	1,619,032
Juan Vera ⁽⁵⁾						
President and Chief Executive Officer	2022	379,981	52,800	149,142 ⁽⁴⁾	_	581,923
Mythili Koneru ⁽⁶⁾						
Former Chief	2022	424,269	52,800	155,313 ⁽⁴⁾	_	632,382
Medical Officer	2021	405,827	351,400	144,311	_	901,538
Anthony Kim ⁽⁷⁾						
Former Chief	2022	330,370	52,800	_	546,000(8)	929,170
Financial Officer	2021	400,754	401,600	145,937 ⁽³⁾	_	948,291

⁽¹⁾ The amounts reported do not reflect the amounts actually received by our named executive officers. Instead, in accordance with SEC rules, these amounts reflect the grant date fair value of each stock option granted to our named executive officers during the fiscal year ended December 31, 2022, as computed in accordance with Financial Accounting Standard Board Accounting Standards Codification Topic 718 for stock-based compensation transactions ("FASB ASC 718"). The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option pricing model. The significant factors and assumptions incorporated in the Black-Scholes-Merton model used to estimate the value of the options are included in Note 12 to our audited financial statements included in our Annual Report on Form 10-K. As required by SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Our named executive officers who have received options will only realize compensation with regard to these options to the extent the trading price of our common stock is greater than the exercise price of such options.

⁽²⁾ Mr. Hoang resigned as our President and Chief Executive Officer effective May 1, 2023. Mr. Hoang did not earn compensation during 2021 or 2022 for his service on the Board.

- (3) With respect to Messrs. Hoang and Kim the Board determined to pay half of the 2021 annual incentives in the form of fully vested restricted stock units, as described below in "-Narrative to Summary Compensation Table Executive Compensation Program Annual Incentive Compensation." Pursuant to SEC rules, the amount of the annual incentives awarded to each named executive officer has been reported in the Summary Compensation Table under the "Non-Equity Incentive Plan Compensation" column for fiscal year 2021.
- (4) With respect to Dr. Vera and Dr. Koneru, the Board determined to pay 51% and 55% respectively, of the 2022 annual incentives in the form of equity awards under the Company's 2020 Equity Incentive Plan (as amended, the "2020 Plan), as described below in "-Narrative to Summary Compensation Table Executive Compensation Program Annual Incentive Compensation".
- (5) Dr. Vera was not a named executive officer for 2021, and as a result his compensation for that year has been omitted pursuant to applicable SEC rules and regulations. Dr. Vera did not earn compensation during 2022 for his service on the Board. Dr. Vera was appointed President and Chief Executive officer effective May 1, 2023. The Compensation Committee has not determined the terms of Dr. Vera's compensation as President and Chief Executive Officer as of the date of this proxy statement.
- (6) Effective April 9, 2023, Dr. Koneru is no longer with the Company.
- (7) Mr. Kim ceased serving as our Chief Financial Officer in September 2022.
- (8) This amount consists of \$546,000 in separation-related payments as described below. In recognition of Mr. Kim's service to the Company, the Company provided Mr. Kim with severance benefits consistent with those contemplated by his Employment Agreement, dated as of November 27, 2018, by and between the Company and Mr. Kim (the "Employment Agreement"). Pursuant to the Employment Agreement, we agreed to pay (i) Mr. Kim's base salary for the 12-month period following the separation date of September 30, 2022, totaling \$420,000 and (ii) a pro-rated bonus of \$126,000.

NARRATIVE TO SUMMARY COMPENSATION TABLE

Our executive compensation program is designed to achieve the following objectives:

- attract, motivate and reward our named executive officers whose knowledge, skills, performance and business relationships are critical to our success;
- motivate our named executive officers to manage our business to meet short-term and long-range goals designed to drive the responsible creation of stockholder value and reward accomplishment of these goals;
- align the interests of our executive officers and stockholders by linking their long-term incentive compensation opportunities to stockholder value creation; and
- provide a competitive compensation package within the context of responsible cost management.

We review compensation annually for all employees, including our named executive officers. In setting executive base salaries and granting equity and non-equity incentive awards, we consider compensation for comparable positions in the market, the historical compensation levels of our executives, individual performance as compared to our expectations and objectives, our desire to motivate our employees to achieve short- and long-term results that are in the best interests of our stockholders and a long-term commitment to the Company. We do not target a specific mix of compensation among base salary, bonus or long-term incentives, but we structure a significant portion of our executives' compensation to be variable, at risk and tied directly to the measurable performance of our Company and each executive officer.

Role of the Compensation Committee and Executive Officers in Setting Executive Compensation

The Compensation Committee of our Board ("Compensation Committee") is responsible for determining our executives' compensation. Our Compensation Committee typically reviews and discusses management's proposed compensation with the Chief Executive Officer for all executives other than the Chief Executive

Officer. Based on those discussions and its discretion, the Compensation Committee then approves the compensation of each executive officer without members of management present. The Chief Executive Officer may not participate in, or be present during, any deliberations or determinations of the Compensation Committee regarding his compensation. The Compensation Committee makes recommendations to the Board regarding the Chief Executive Officer's compensation for approval by the full Board.

During the past fiscal year, after taking into consideration the factors prescribed by the SEC and Nasdaq described above, the Compensation Committee engaged Radford, which is part of the Rewards Solutions practice at Aon plc, as its compensation consultant ("Radford"). Our Compensation Committee identified Radford based on Radford's general reputation in the industry. The Compensation Committee requested that Radford:

- evaluate the efficacy of the Company's existing compensation strategy and practices in supporting and reinforcing the Company's long-term strategic goals; and
- assist in refining the Company's compensation strategy and in developing and implementing an executive compensation program to execute that strategy.

As part of its engagement, Radford was also requested by the Compensation Committee to develop a comparative group of companies and to perform analyses of competitive performance and compensation levels for that group and ultimately developed recommendations that were presented to the Compensation Committee for its consideration. Following an active dialogue with Radford, the Compensation Committee approved the recommendations.

Historically, the Compensation Committee has made most of the significant adjustments to annual compensation, determined bonus and equity awards and established new performance objectives at one or more meetings held during the first quarter of the year. However, the Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of the Company's compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. Generally, the Compensation Committee's process comprises two related elements: the determination of compensation levels and the establishment of performance objectives for the current year. For executives other than the Chief Executive Officer, the Compensation Committee solicits and considers evaluations and recommendations submitted to the Committee by the Chief Executive Officer. In the case of the Chief Executive Officer, the evaluation of his performance is conducted by the Compensation Committee, which recommends to the Board for approval any adjustments to his compensation as well as awards to be granted. For all executives and directors as part of its deliberations, the Compensation Committee may review and consider, as appropriate, materials such as financial reports and projections, operational data, tax and accounting information, tally sheets that set forth the total compensation that may become payable to executives in various hypothetical scenarios, executive and director stock ownership information, company stock performance data, analyses of historical executive compensation levels and current Company-wide compensation levels and recommendations of Radford, including analyses of executive and director compensation paid at other companies identified by Radford.

The Compensation Committee also evaluates our executive compensation program in light of our stockholders' views and our transforming business needs and expects to continue to consider the outcome of our "say on pay" votes and our stockholders' views when making future executive compensation decisions.

EXECUTIVE COMPENSATION PROGRAM

The annual compensation arrangements for our named executive officers consist of an annual base salary and long-term incentive compensation in the form of equity awards. Our named executive officers are also eligible to receive short-term incentive compensation in the form of annual incentive awards, which may be paid in cash or equity-based awards. We have historically emphasized the use of equity to provide incentives for our named executive officers to focus on the growth of our overall enterprise value and, correspondingly, to create sustainable value for our stockholders.

Annual Base Salary

We have entered into employment agreements with each of our named executive officers that establish annual base salaries, which are generally determined, approved and reviewed periodically by our Compensation Committee in order to compensate our named executive officers for the satisfactory performance of duties to the Company. Annual base salaries are intended to provide a fixed component of compensation to our named executive officers, reflecting their expertise, experience, knowledge, roles and responsibilities. Base salaries for our named executive officers have generally been set at levels deemed necessary to attract and retain individuals with superior talent. Merit-based increases to salaries are based on management's assessment of the individual executive's performance, the recommendations made by the Chief Executive Officer to the Compensation Committee and the competitive market in which the Company operates for talent.

The following table presents the annual base salaries for each of our named executive officers for 2022 and 2021, as determined by the Board or Compensation Committee, as applicable:

Name	2022 Annual Base Salary (\$)	2021 Annual Base Salary (\$)
Peter Hoang	424,270	424,270
Juan Vera	380,544	371,843
Mythili Koneru	425,000	406,000
Anthony Kim	420,000	400,925

Annual Incentive Compensation

Our named executive officers are eligible to receive annual incentive compensation based on the satisfaction of individual and corporate performance objectives established by the Board. Each named executive officer has a target annual incentive opportunity, calculated as a percentage of annual base salary, and may earn more or less than the target amount based on our company's and his or her individual performance. For 2022 and 2021, the target annual incentive opportunities as a percentage of base salary for our named executive officers were 50% for Mr. Hoang, 40% for Mr. Kim and Dr. Vera and 35% for Dr. Koneru. The amounts of any annual incentives earned are determined after the end of the year, based on the achievement of the designated corporate and individual performance objectives, and may be paid in cash or equity-based awards.

For 2022 and 2021, annual incentives were earned based on the Compensation Committee's assessment of each executive's performance. The amounts of such annual incentives, which are set forth in the "Summary Compensation Table" above, were recommended by the Compensation Committee and approved by the Board in February 2023 and March 2022 based on each executive's and our corporate performance in 2022 and 2021, respectively. The Board determined that our percentage attainment of our corporate goals for 2022 was 95% and for 2021 it was 91% and approved individual performance payouts for each named executive officer for each such year. The annual incentives paid to the named executive officers for 2022 performance are included in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table above.

For 2022, the Board determined not to pay Mr. Hoang an award and to pay 51% and 55% of these awards for Dr. Vera and Dr. Koneru, respectively, in the form of stock options. Such stock options were granted under the Company's 2020 Plan and are set forth in the table below. Mr. Kim was not eligible to receive an award for 2022 performance. These stock options vest in equal monthly installments over a four-year period commencing on March 27, 2023, subject to each officer's continuous service with us at each vesting date.

Name	Grant In Lieu of Earned Annual Incentive Compensation 2022 (Number of Shares Underlying Options)	Grant Date Fair Value (\$) ⁽¹⁾
Juan Vera	46,487	75,918
Mythili Koneru	51,918	84,788

(1) The amounts reported do not reflect the amounts actually received by our named executive officers. Instead, in accordance with SEC rules, these amounts reflect the grant date fair value of each stock option granted to our named executive officers during the fiscal year ended December 31, 2022, as computed in accordance with FASB ASC 718. The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option pricing model. The significant factors and assumptions incorporated in the Black-Scholes-Merton model used to estimate the value of the options are included in Note 12 to our audited financial statements included in our Annual Report on Form 10-K.

For 2021, the Board determined to pay half of these awards for Messrs. Hoang and Kim in 50% in the form of fully vested restricted stock units and all of this award in cash for Dr. Koneru. Such restricted stock units were granted under our 2020 Plan and are set forth in the table below. Each restricted stock unit was fully vested upon grant.

Name	Restricted Stock Units Grant In Lieu of 50% of Earned Annual Incentive Compensation 2021 (Number of Shares)	Grant Date Fair Value (\$) ⁽¹⁾	
Peter Hoang	199,094	96,521	
Anthony Kim	150,512	72,968	

⁽¹⁾ For each of Messrs. Hoang and Kim the Board determined the number of shares subject to the restricted stock unit by dividing 50% of the amount of the cash bonus approved by the Board by the closing price of the Company's common stock on the date of grant, which was March 24, 2022.

The annual incentives paid to the named executive officers for 2022 and 2021 performance are included in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table above.

Equity-Based Awards

Our equity-based incentive awards granted to our named executive officers are designed to align the interests of our named executive officers with those of our stockholders. Vesting of equity awards is generally tied to each officer's continuous service with us and serves as an additional retention measure. Awards are granted pursuant to our 2020 Plan. Our executives generally are awarded an initial new hire grant upon commencement of employment and thereafter on an annual basis, subject to the discretion of the Board or Compensation Committee, as applicable. The equity awards described in this section are included in the "Option Awards" column of the Summary Compensation Table above.

RETIREMENT BENEFITS AND OTHER COMPENSATION

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension, retirement or deferred compensation plan sponsored by us during 2022. Our named executive officers are eligible to participate in our benefit programs on the same basis as all employees of our company. We generally do not provide perquisites or personal benefits to our named executive officers except in limited circumstances, and we did not provide any perquisites or personal benefits to our named executive officers in 2022.

AGREEMENTS WITH OUR NAMED EXECUTIVE OFFICERS AND POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE IN CONTROL

We have entered into employment agreements with each of our named executive officers that provide for the basic terms of their employment, including base salary, annual incentive opportunity and equity grants, as well as certain severance and change of control benefits. Each of our named executive officers is employed at will and may be terminated at any time for any reason.

Peter Hoang

We entered into an employment agreement with Mr. Hoang in September 2017 and an amendment thereto in March 2019. The term of the agreement was for three years and automatically extended for successive additional 12 months terms unless terminated by Mr. Hoang or us. Under the terms of his employment agreement, Mr. Hoang was eligible to receive a base salary of \$362,500, which was subsequently increased by the Board to \$380,000 by the March 2019 amendment, and an annual target incentive opportunity of up to 50% of his annual base salary based upon the assessment by the Board of Mr. Hoang's performance and other conditions as the Board shall have determined in its sole discretion on an annual basis. Pursuant his employment agreement, Mr. Hoang was subject to a covenant not to disclose our confidential information during his employment term and an assignment of intellectual property rights. Also, during his employment term and for a period of 12 months thereafter, Mr. Hoang covenanted not to compete with us and not to solicit any of our customers, vendors or employees.

Potential Payments Upon Termination or Change in Control

Under Mr. Hoang's employment agreement, if his employment had been terminated by us for cause or by Mr. Hoang without good reason (each, as defined in his employment agreement) during the term of the agreement, he would have been entitled to received (i) his then-current annual base salary through the date of termination; (ii) any reimbursable expenses for which he had not yet been reimbursed as of the date of termination; and (iii) any other rights and vested benefits (if any) provided under employee benefit plans and programs of the Company, determined in accordance with the applicable terms and provisions of such plans and programs ("Accrued Compensation"). If Mr. Hoang's employment was terminated by us without cause or by Mr. Hoang for good reason, subject to Mr. Hoang's execution of a release of claims against us, and in addition to the payment of the Accrued Compensation, Mr. Hoang would have been entitled to (i) a payment equal to 12 months of his annual base salary, as in effect at the termination date; (ii) any earned but unpaid bonus for the prior calendar year; and (iii) a pro-rated bonus payment equal to his target annual performance bonus for the calendar year in which his employment was terminated provided that, Mr. Hoang had served a minimum of six months during the calendar year in which his termination occurred (the "Hoang Additional Severance Payments"). Mr. Hoang is eligible for continued health insurance coverage for 12 months after the date of Mr. Hoang's termination. Further, if we did not renew Mr. Hoang's employment agreement at the end of the term, Mr. Hoang would have been entitled to be paid 12 months of his annual base salary over a 12-month period.

If Mr. Hoang's employment had been terminated by us without cause or by him for good reason during the period of six months following a change in control (as defined in his employment agreement), in lieu of the Hoang Additional Severance Payments and health insurance coverage described above, Mr. Hoang would have been entitled to receive a severance payment equal to the sum of (i) 18 months of his annual base salary, at the higher of the base salary rate in effect on the date of termination or the base salary rate in effect immediately before the effective date of the change in control, and (ii) his performance bonus for the year, which includes the effective date of the change in control, payable at the limit of performance amount. In addition, he would have also received in the same payment the amount of any performance bonus that, as of the date of termination, he had earned but had not yet been paid by us, and he would have been entitled to the vesting of all of outstanding equity awards, such that all such equity awards would have been fully vested as of the date of Mr. Hoang's termination. Mr. Hoang would also have been eligible for continued health insurance coverage for 18 months after the date of his termination.

Mr. Hoang resigned as our President and Chief Executive Officer effective May 1, 2023. In connection with his resignation, Mr. Hoang and the Company entered into the Separation Agreement (the "Separation Agreement"), dated as of April 27, 2023, providing for the terms of Mr. Hoang's separation from employment with the Company effective May 1, 2023. Under the Separation Agreement, the Company has agreed, provided that Mr. Hoang does not revoke the Separation Agreement during the seven-day period following his signing of the agreement, to provide Mr. Hoang with the following separation payments and benefits: (i) a payment equal to 12 months of his annual base salary, as in effect at the date of his separation from the Company, less all applicable taxes and withholdings, to be paid in a lump sum; and (ii) subject to Mr. Hoang's election of COBRA, payment of the premiums for group health and/or dental insurance coverage under COBRA until the earlier of (a) May 30, 2024, (b) the date on which Mr. Hoang becomes eligible to receive group health

insurance coverage through another employer, or (c) the date Mr. Hoang ceases to be eligible for COBRA continuation coverage for any reason. The Separation Agreement contains releases, subject to customary exceptions, and covenants not to disparage.

Juan Vera

We entered into an employment agreement with Dr. Vera in July 2019. Under the terms of his employment agreement, Dr. Vera is eligible to receive a base salary of \$350,000 and an annual target incentive opportunity of 35% of his annual base salary based upon the assessment by the Compensation Committee of Dr. Vera's performance and other conditions as the Board shall have determined in its sole discretion on an annual basis. Pursuant to his employment agreement, Dr. Vera is subject to a covenant not to disclose our confidential information during his employment term and an assignment of intellectual property rights. Also, during his employment term and for a period of 12 months thereafter, Dr. Vera has covenanted not to compete with us and not to solicit any of our customers, vendors or employees.

Potential Payments Upon Termination or Change in Control

Under Dr. Vera's employment agreement, if his employment is terminated by us for cause or by Dr. Vera without good reason (each as defined in his employment agreement) during the term of the agreement, he will be entitled to receive his Accrued Compensation. If Dr. Vera's employment is terminated by us without cause or by Dr. Vera for good reason, subject to Dr. Vera's execution of a release of claims against us, and in addition to the payment of the Accrued Compensation, Dr. Vera will be entitled to (i) a payment equal to 12 months of his annual base salary as in effect at the termination date and (ii) a pro-rated bonus payment equal to his target annual performance bonus for the calendar year in which his employment was terminated (the "Vera Additional Severance Payments"). Dr. Vera will also be eligible for continued health insurance coverage until the earliest of (i) 12 months after the date of Dr. Vera's termination, (ii) the expiration of Dr. Vera's eligibility for COBRA coverage and (iii) the date Dr. Vera becomes eligible for substantially equivalent health insurance coverage.

If Dr. Vera's employment is terminated by us without cause or by him for good reason during the period of 12 months following a change in control of us (as defined in his employment agreement), in lieu of the Additional Severance Payments and health insurance coverage described above and subject to Dr. Vera's execution of a release of claims, Dr. Vera will be entitled to (i) a payment equal to 12 months of his annual base salary as in effect at the termination date, (ii) a bonus payment equal to his target annual performance bonus for the year of termination and (iii) vesting of all of Dr. Vera's outstanding equity awards subject to time-based vesting requirements, such that all such equity awards will be fully vested as of the date of Dr. Vera's termination.

Dr. Vera was appointed President and Chief Executive Officer in April 2023. As of the date of this proxy statement, the Compensation Committee has not determined the terms of Dr. Vera's compensation as President and Chief Executive Officer.

Mythili Koneru

We entered into an employment agreement with Dr. Koneru in February 2019. Under the terms of her employment agreement, Dr. Koneru was eligible to receive a base salary of \$350,000 and an annual target incentive opportunity of 35% of her annual base salary based upon the assessment by the Compensation Committee of Dr. Koneru's performance and other conditions as the Board shall have determined in its sole discretion on an annual basis. Pursuant to her employment agreement, Dr. Koneru was subject to a covenant not to disclose our confidential information during her employment term and an assignment of intellectual property rights. Also, during her employment term and for a period of 12 months thereafter, Dr. Koneru covenanted not to compete with us and not to solicit any of our customers, vendors or employees.

Potential Payments Upon Termination or Change in Control

Under Dr. Koneru's employment agreement, if her employment had been terminated by us for cause or by Dr. Koneru without good reason (each as defined in her employment agreement) during the term of the agreement, she would have been entitled to receive her Accrued Compensation. If Dr. Koneru's employment

was terminated by us without cause or by Dr. Koneru for good reason, subject to Dr. Koneru's execution of a release of claims against us, and in addition to the payment of the Accrued Compensation, Dr. Koneru would have been entitled to (i) a payment equal to 12 months of her annual base salary as in effect at the termination date and (ii) a pro-rated bonus payment equal to her target annual performance bonus for the calendar year in which her employment was terminated (the "Koneru Additional Severance Payments"). Dr. Koneru would have also been eligible for continued health insurance coverage until the earliest of (i) 12 months after the date of Dr. Koneru's termination, (ii) the expiration of Dr. Koneru's eligibility for COBRA coverage and (iii) the date Dr. Koneru becomes eligible for substantially equivalent health insurance coverage.

If Dr. Koneru's employment had been terminated by us without cause or by her for good reason during the period of 12 months following a change in control of us (as defined in her employment agreement), in lieu of the Additional Severance Payments and health insurance coverage described above and subject to Dr. Koneru's execution of a release of claims, Dr. Koneru would have been entitled to (i) a payment equal to 12 months of her annual base salary as in effect at the termination date, (ii) a bonus payment equal to her target annual performance bonus for the year of termination and (iii) vesting of all of Dr. Koneru's outstanding equity awards subject to time-based vesting requirements, such that all such equity awards would have been fully vested as of the date of Dr. Koneru's termination.

Dr. Koneru resigned as our Chief Medical Officer in April 2023 and pursuant to the terms of her employment agreement was not eligible for any of the severance benefits described above.

Anthony Kim

We entered into an employment agreement with Mr. Kim in November 2018. Under the terms of his employment agreement, Mr. Kim was eligible to receive a base salary of \$375,000 and an annual target incentive opportunity of 40% of his annual base salary based upon the assessment by the Compensation Committee of Mr. Kim's performance and other conditions as the Board shall have determined in its sole discretion on an annual basis. Pursuant to his employment agreement, Mr. Kim was subject to a covenant not to disclose our confidential information during his employment term and an assignment of intellectual property rights. Also, during his employment term and for a period of 12 months thereafter, Mr. Kim covenanted not to compete with us and not to solicit any of our customers, vendors or employees.

Potential Payments Upon Termination or Change in Control

Under Mr. Kim's employment agreement, if his employment had been terminated by us for cause or by Mr. Kim without good reason (each as defined in his employment agreement) during the term of the agreement, he would have been entitled to receive his Accrued Compensation. If Mr. Kim's employment was terminated by us without cause or by Mr. Kim for good reason, subject to Mr. Kim's execution of a release of claims against us, and in addition to the payment of the Accrued Compensation, Mr. Kim would have been entitled to (i) a payment equal to 12 months of his annual base salary as in effect at the termination date and (ii) a pro-rated bonus payment equal to his target annual performance bonus for the calendar year in which his employment was terminated (the "Kim Additional Severance Payments"). Mr. Kim would have also been eligible for continued health insurance coverage until the earliest of (i) 12 months after the date of Mr. Kim's termination, (ii) the expiration of Mr. Kim's eligibility for COBRA coverage and (iii) the date Mr. Kim becomes eligible for substantially equivalent health insurance coverage.

If Mr. Kim's employment had been terminated by us without cause or by him for good reason during the period of 12 months following a change in control of us (as defined in his employment agreement), in lieu of the Kim Additional Severance Payments described above and subject to Mr. Kim's execution of a release of claims, Mr. Kim would have been entitled to (i) a payment equal to 12 months of his annual base salary as in effect at the termination date, (ii) a bonus payment equal to his target annual performance bonus for the year of termination and (iii) vesting of all of Mr. Kim's outstanding equity awards subject to time-based vesting requirements, such that all such equity awards would have been fully vested as of the date of Mr. Kim's termination. Mr. Kim would have also been eligible for continued health insurance coverage until the earliest of (i) 12 months after the date of Mr. Kim's termination, (ii) the expiration of Mr. Kim's eligibility for COBRA coverage and (iii) the date Mr. Kim becomes eligible for substantially equivalent health insurance coverage.

Mr. Kim's employment with us ended on September 30, 2022. In recognition of Mr. Kim's service to the Company, we provided Mr. Kim with severance benefits consistent with those contemplated by his employment agreement as if he had been terminated without cause.

OUTSTANDING EQUITY AWARDS AS OF DECEMBER 31, 2022

The following table sets forth certain information about outstanding equity awards granted to our named executive officers that were outstanding as of December 31, 2022, as adjusted for Reverse Stock Split.

	Option Awards ⁽¹⁾				
Name	Grant Date	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable ⁽⁴⁾	Option Exercise Price (\$)	Option Expiration Date
Peter Hoang	2/17/2022	8,958	34,042(2)	4.60	2/17/2032
	2/11/2021	19,708	$23,292^{(2)}$	30.60	2/11/2031
	3/10/2020	29,561	13,439 ⁽²⁾	21.20	3/10/2030
	10/18/2018	135,986	_	91.80	10/19/2028
Juan Vera	2/17/2022	3,333	$12,667^{(2)}$	4.60	2/17/2032
	2/10/2021	6,417	7,583 ⁽²⁾	32.90	2/10/2031
	3/10/2020	9,626	4,374 ⁽²⁾	21.20	3/10/2030
	11/27/2018	50,000	_	91.80	10/19/2028
Mythili Koneru	2/17/2022	3,333	12,667 ⁽²⁾	4.60	2/17/2032
	2/10/2021	6,417	7,583 ⁽²⁾	32.90	2/10/2031
	3/10/2020	9,626	4,374 ⁽²⁾	21.20	3/10/2030
	2/7/2019	1,000	_	51.00	2/7/2029
	2/7/2019	28,750	$1,250^{(3)}$	51.00	2/7/2029
Anthony Kim	_	_	_	_	_

⁽¹⁾ The option awards listed in the table granted prior to June 2020 were granted under our 2014 Omnibus Stock Ownership Plan. The option awards listed in the table granted after June 2020 were granted under our 2020 Plan.

⁽²⁾ The shares subject to this award vest in substantially equal monthly installments over 48 months from the date of grant, subject to the named executive officer's continued service as of each such vesting date

⁽³⁾ Twenty-five percent of the shares subject to this award vested upon the first anniversary of the date of grant, with the remainder of the shares vesting in substantially equal monthly installments over 48 months from the date of grant, subject to the named executive officer's continued service as of each such vesting date.

⁽⁴⁾ The unvested shares subject to these option awards may be subject to accelerated vesting upon a qualifying termination of employment following a "change in control", see "Agreements with Our Named Executive Officers and Potential Payments Upon Termination or Change in Control."

ITEM 402(V) PAY VERSUS PERFORMANCE

In accordance with rules adopted by the Securities and Exchange Commission pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, we provide the following disclosure regarding executive compensation for our principal executive officer ("PEO") and non-PEO named executive officers ("Non-PEO NEOs") and Company performance for the fiscal years listed below. The Compensation Committee did not consider the pay versus performance disclosure below in making its pay decisions for any of the years shown.

Pay Versus Performance Table

The amounts set forth below under the headings "Compensation Actually Paid to PEO" and "Average Compensation Actually Paid to Non-PEO NEOs" have been calculated in a manner consistent with Item 402(v) of Regulation S-K. Use of the term "compensation actually paid" is required by the SEC's rules, and as a result of the calculation methodology required by the SEC, such amounts differ from compensation actually received by the individuals for the fiscal years listed below. In calculating the compensation actually paid amounts reflected in these columns, the fair value or change in fair value, as applicable, of the equity award adjustments included in such calculations were computed in accordance with FASB ASC Topic 718.

Year	Summary Compensation Table Total for PEO ⁽¹⁾ (\$) Compensation Actually Paid to PEO ⁽²⁾ (\$) (\$)		Average Summary Compensation Table Total for Non-PEO NEOs ⁽³⁾ (\$)	Average Compensation Actually Paid to Non-PEO NEOs ⁽⁴⁾ (\$)	Value of Initial Fixed \$100 Investment based on TSR ⁽⁵⁾ (\$)	Net Income (Loss) ⁽⁶⁾ (\$ Millions)
(a)	(b)	(c)	(d)	(e)	(f)	(h)
2022	566,170	278,141	613,007	497,603	18.34	(29.93)
2021	1,619,032	914,489	924,915	640,117	65.53	(41.88)

⁽¹⁾ The dollar amounts reported in column (b) are the amounts of total compensation reported for Peter Hoang (our Former Chief Executive Officer) for each corresponding year in the "Total" column of the Summary Compensation Table. Refer to "Executive Compensation – Summary Compensation Table."

(2) In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to Peter Hoang's total compensation for each year to determine the compensation actually paid:

Year	Reported Summary Compensation Table Total for PEO (\$)	Less, Grant Date Fair Value of Option Awards Reported in the Summary Compensation Table for Applicable Year for PEO (\$)(a)	Inclusion of Equity Values for PEO ^{(a)(b)} (\$)	Compensation Actually Paid to PEO (\$)
2022	566,170	(141,900)	(146,129)	278,141
2021	1.619.032	(1.001.900)	297.357	914.489

- (a) The fair values of the equity awards were calculated using valuation assumptions that materially differ from those disclosed at the time of grant, including the fair value of options was estimated using the Black-Scholes option-pricing model (which reflects for each particular award and valuation date: expected stock price volatility, risk-free interest rate, dividend yield, expected term calculated using the simplified method, and stock price). Declining stock price served as the primary driver of change in the fair value of options, partially offset by an increase in risk-free interest rate in particular for options granted prior to 2021, none of which were in-the-money as of any valuation date applicable to this table.
- (b) The amounts in the Inclusion of Equity Values in the tables above are derived from the amounts set forth in the following tables:

Year	Plus, Year-End Fair Value of Equity Awards Granted During Year That Remained Unvested as of Last Day of Year for PEO (\$)	Plus, Year Over Year Change in Fair Value from Prior Year End to Year End of Unvested Equity Awards for PEO (\$)	Plus, Vesting- Date Fair Value of Equity Awards Granted During Year that Vested During Year for PEO (\$)	Plus, Year Over Year Change in Fair Value from Prior Year End to Vesting Date of Equity Awards that Vested During Year for PEO (\$)	Less, Fair Value at Prior Year End of Equity Awards Failed to Meet Vesting Conditions During Year for PEO (\$)	Total – Inclusion of Equity Values for PEO (\$)
2022	59,653	(137,243)	22,968	(91,507)	_	(146,129)
2021	146,684	(143,953)	123,195	171,431	_	297,357

- (3) The dollar amounts reported in column (d) represent the average of the amounts reported for the Non-PEO NEOs in the "Total" column of the Summary Compensation Table for each applicable year. The Non-PEO NEOs included for purposes of calculating the average amounts in each applicable year are as follows: (i) for 2022, Juan Vera, Anthony Kim and Mythili Koneru; and (ii) for 2021, Anthony Kim and Mythili Koneru.
- (4) In accordance with the requirements of Item 402(v) of Regulation S-K, the following adjustments were made to determine the average Non-PEO NEO compensation actually paid:

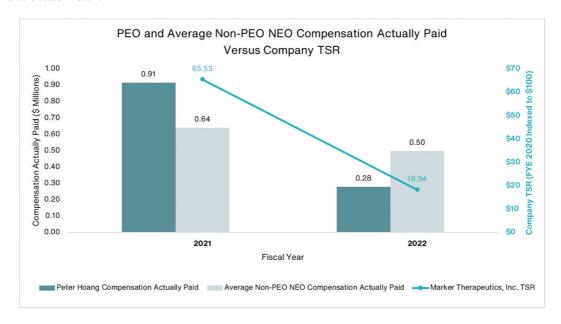
Year	Average Reported Summary Compensation Table Total for Non-PEO NEOs (\$)	Less, Grant Date Fair Value of Option Awards Reported in the Summary Compensation Table for Applicable Year for Non- PEO NEOs ^(a) (\$)	Plus, Average Inclusion of Equity Values for Non-PEO NEOs ^(b) (\$)	Average Compensation Actually Paid to Non-PEO NEOs (\$)
2022	613,007	(52,800)	(62,604)	497,603
2021	924,915	(376,500)	91,702	640,117

- (a) The fair values of the equity awards were calculated using valuation assumptions that materially differ from those disclosed at the time of grant, including the fair value of options was estimated using the Black-Scholes option-pricing model (which reflects for each particular award and valuation date: expected stock price volatility, risk-free interest rate, dividend yield, expected term calculated using the simplified method, and stock price). Declining stock price served as the primary driver of change in the fair value of options, partially offset by an increase in risk-free interest rate in particular for options granted prior to 2021, none of which were in-the-money as of any valuation date applicable to this table.
- (b) The amounts in the Inclusion of Equity Values in the tables above are derived from the amounts set forth in the following tables:

Year	Plus, Average Year-End Fair Value of Equity Awards Granted During Year That Remained Unvested as of Last Day of Year for Non-PEO NEOs (S)	Plus, Average Year Over Year Change in Fair Value from Prior Year End to Year End of Unvested Equity Awards for Non-PEO NEOs (\$)	Plus, Average Vesting-Date Fair Value of Equity Awards Granted During Year that Vested During Year for Non-PEO NEOS (\$)	Plus, Average Year Over Year Change in Fair Value from Prior Year End to Vesting Date of Equity Awards that Vested During Year for Non-PEO NEOS (S)	Less, Average Fair Value at Prior Year End of Equity Awards Failed to Meet Vesting Conditions During Year for Non-PEO NEOS (\$)	Total – Average Inclusion of Equity Values for Non-PEO NEOS (\$)
2022	14,792	(30,213)	7,701	(31,657)	(23,227)	(62,604)
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2021	49,514	(53,965)	41,758	54,395	0	91,702

- (5) The values in column (f) represents the Total Shareholder Return ("TSR") for each applicable year calculated based on a fixed investment of \$100 in the Company for the period starting December 31, 2020, through the end of the listed year on the same cumulative basis as is used in Item 201(e) of Regulation S-K. Historical stock performance is not necessarily indicative of future stock performance.
- (6) The dollar amounts reported represent the amount of net income (loss) reflected in the Company's audited financial statements for the applicable year.

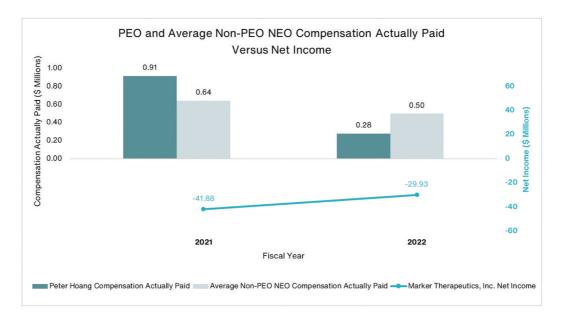
Description of Relationship Between PEO and Non-PEO NEO Compensation Actually Paid and Company Total Shareholder Return



The following chart sets forth the relationship between Compensation Actually Paid to our PEO, the average of Compensation Actually Paid to our Non-PEO NEOs, and the Company's cumulative TSR over the two most recently completed fiscal years.

Description of Relationship Between PEO and Non-PEO NEO Compensation Actually Paid and Net Income (Loss)

The following chart sets forth the relationship between Compensation Actually Paid to our PEO, the average of Compensation Actually Paid to our Non-PEO NEOs, and our net income (loss) during the two most recently completed fiscal years.



All information provided above under the "Item 402(v) Pay Versus Performance" heading will not be deemed to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent the Company specifically incorporates such information by reference.

DIRECTOR COMPENSATION

NON-EMPLOYEE DIRECTOR COMPENSATION

The following table shows for the fiscal year ended December 31, 2022 certain information with respect to the compensation of our non-employee directors:

Name ⁽¹⁾⁽²⁾	Fees Earned or Paid in Cash (\$) ⁽³⁾	Option Awards (\$)	Total (\$)
David Eansor	74,116	19,200	93,316
Steven Elms	52,500	19,200	71,700
Katharine Knobil	43,511	19,200	62,711
David Laskow-Pooley	60,405	19,200	79,605
Frederick Wasserman	34,360 ⁽⁴⁾	_	34,360
John Wilson	48,000	19,200	67,200

- (1) Peter Hoang and Juan Vera did not earn compensation during 2022 for their service on the Board of Directors. As named executive officers, each of Mr. Hoang's and Dr. Vera's compensation is fully reflected in the "Summary Compensation Table" above.
- (2) As of December 31, 2022, Messrs. Eansor, Elms, Laskow-Pooley and Wilson each held options to purchase 9,250 shares of our common stock, as adjusted for the Reverse Stock Split. Dr. Knobil, Mr. Hoang and Dr. Vera held options to purchase 20,500 shares, 264,985 shares and 94,000 shares, respectively, as of the same date, each as adjusted for the Reverse Stock Split.
- (3) The amount in this column represents the grant date fair value of stock options awarded to the directors during the fiscal year ended December 31, 2022 for his or her service on the Board of Directors, as computed in accordance with FASB ASC 718. The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option pricing model. The significant factors and assumptions incorporated in the Black-Scholes-Merton model used to estimate the value of the options are included in Note 12 to our audited financial statements included in our Annual Report on Form 10-K.
- (4) Mr. Wasserman resigned from the board in May 2022. This amount reflects the pro rata portion of his fees earned during 2022.

NARRATIVE TO DIRECTOR COMPENSATION TABLE

Our Director Compensation Program is assessed periodically relative to our comparators by Radford, the Compensation Committee's independent compensation consultant. The program was most recently amended in February 2022. Pursuant to this program, each of our directors who is not an employee of the Company is eligible to receive compensation for service on our Board of Directors and committees thereof.

Under our current compensation policy, each eligible director receives an annual cash retainer in the amount of \$40,000 for serving on our Board of Directors. In addition, the Chair of our Board of Directors receives an annual cash retainer in the amount of \$30,000 (in addition to the annual cash retainer given to all eligible directors). The chairperson of the Audit Committee of our Board of Directors is entitled to receive an additional annual cash retainer in the amount of \$15,000, the chairperson of the Compensation Committee of our Board of Directors is entitled to receive an additional annual cash retainer in the amount of \$10,000 and the chairperson of the Nominating and Corporate Governance Committee of our Board of Directors is entitled to receive an additional annual cash retainer in the amount of \$8,000. The other members of the Audit Committee are entitled to receive an additional annual cash retainer in the amount of \$7,500, the other members of the Compensation Committee are entitled to receive an additional cash retainer in the amount of

\$5,000 and the other members of the Nominating and Corporate Governance Committee are entitled to receive an additional annual cash retainer in the amount of \$4,000.

In addition, each new eligible director who joins our Board of Directors is entitled to receive a non-statutory stock option to purchase shares of our common stock having a value of \$120,000 under our 2020 Plan, with the shares vesting in 36 equal monthly installments, subject to continued service as a director through the vesting dates.

On the date of each Annual Meeting of our stockholders, each eligible director who continues to serve as a director of our Company following the meeting is entitled to receive a non-statutory stock option to purchase shares of our common stock having a value of \$100,000 under our 2020 Plan (the "Annual Grant"), provided that no Annual Grant shall total more than 8,000 shares (as adjusted for the Reverse Stock Split) shares, with the Annual Grant shares vesting on the first anniversary of the date of grant, subject to continued service as a director though the vesting date.

The exercise price per share of each stock option granted under the non-employee director compensation policy will be equal to the closing price of our common stock on the Nasdaq Global Market on the date of grant. Each stock option will have a term of ten years from the date of grant, subject to earlier termination in connection with a termination of the eligible director's continuous service with us.

TRANSACTIONS WITH RELATED PERSONS AND INDEMNIFICATION

RELATED-PERSON TRANSACTIONS POLICY AND PROCEDURES

The Company has adopted a written Related Party Transactions Policy that sets forth the Company's policies and procedures regarding the identification, review, consideration and approval or ratification of "related-persons transactions." For purposes of the Company's policy only, a "related-person transaction" is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which the Company and any "related person" are participants involving an amount that is reasonably expected to exceed \$120,000 in any calendar year. Transactions involving compensation for services provided to the Company as an employee, director, consultant or similar capacity by a related person are not covered by this policy. A related person is any executive officer, director, or more than 5% stockholder of the Company, including any of their immediate family members, and any entity owned or controlled by such persons.

Under the policy, where a transaction has been identified as a related-person transaction, management must present information regarding the proposed related-person transaction to the Audit Committee (or, where Audit Committee approval would be inappropriate, to another independent body of the Board) for consideration and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to the Company of the transaction and whether any alternative transactions were available. To identify relatedperson transactions in advance, the Company relies on information supplied by its executive officers, directors and certain significant stockholders. In considering related-person transactions, the Committee takes into account the relevant available facts and circumstances including, but not limited to (a) the risks, costs and benefits to the Company, (b) the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated, (c) the terms of the transaction, (d) the availability of other sources for comparable services or products and (e) the terms available to or from, as the case may be, unrelated third parties or to or from employees generally. In the event a director has an interest in the proposed transaction, the director must recuse himself or herself form the deliberations and approval. The policy requires that, in determining whether to approve, ratify or reject a related-person transaction, the Committee consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, the best interests of the Company and its stockholders, as the Committee determines in the good faith exercise of its discretion.

CERTAIN RELATED-PERSON TRANSACTIONS

The following includes a summary of transactions since January 1, 2021 to which we have been a party, in which the amount involved in the transaction exceeded the lesser of one percent of our average total assets at year-end for the last two completed fiscal years or \$120,000, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our voting securities or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest. Other than described below, there have not been, nor are there currently any proposed, transactions or series of similar transactions to which we have been or will be a party other than compensation arrangements, which include equity and other compensation, termination, change in control and other arrangements, which are described under "Executive Compensation" and "Director Compensation."

Purchases from Bio-Techne Corporation

We contract with Bio-Techne Corporation and two of its brands for the purchases of reagents, primarily cytokines. Mr. David Eansor, a member of our board of directors, served as the President of the Protein Sciences Segment of Bio-Techne Corporation until his retirement in March 2022. In 2022, we purchased \$196,700 of reagents from Bio-Techne Corporation. In 2021, we purchased \$306,000 of reagents from Bio-Techne Corporation.

Purchases from Wilson Wolf Manufacturing Corporation

We contract with Wilson Wolf Manufacturing Corporation for the purchases of cell culture devices called G-Rexes. Mr. John Wilson, a member of our board of directors, is the CEO of Wilson Wolf Manufacturing

Corporation. In 2022, we purchased \$265,000 of cell culture devices from Wilson Wolf Manufacturing Corporation. In 2021, we purchased \$280,000 of cell culture devices from Wilson Wolf Manufacturing Corporation.

Services Agreement with Wilson Wolf

On April 21, 2022, we entered into a binding Services Agreement, dated April 12, 2022, with Wilson Wolf (the "Services Agreement") pursuant to which we agreed to provide Wilson Wolf with certain training and research services. Pursuant to the Services Agreement, Wilson Wolf made a cash payment to us in the amount of \$8.0 million. Pursuant to the Services Agreement, in the event that we become insolvent, go out of business, or an event other than force majeure occurs that prevents us from fulfilling the Services Agreement, Wilson Wolf will have right of first offer and right of first refusal for our manufacturing facility provided it is able and willing to meet whatever financial obligations are required to do so, subject to certain exceptions.

Services Agreement with AlloVir, Inc.

We are party to a services agreement with AlloVir, Inc. ("AlloVir"), pursuant to which we provide AlloVir with development services. Juan Vera, our Chief Executive Officer, President and director, serves on the board of directors of AlloVir. During the term of the services agreement, we and AlloVir may prepare work orders setting forth services to be provided by our company. AlloVir has a \$400,000 work order under the services agreement for long range process development and scale optimization services.

Indemnification

The Company provides indemnification for its directors and officers so that they will be free from undue concern about personal liability in connection with their service to the Company. Under the Company's Bylaws, the Company is required to indemnify its directors and officers to the extent not prohibited under Delaware or other applicable law. The Company has also entered into indemnity agreements with certain officers and directors. These agreements provide, among other things, that the Company will indemnify the officer or director, under the circumstances and to the extent provided for in the agreement, for expenses, damages, judgments, fines and settlements he or she may be required to pay in actions or proceedings which he or she is or may be made a party by reason of his or her position as a director, officer or other agent of the Company, and otherwise to the fullest extent permitted under Delaware law and the Company's Bylaws.

HOUSEHOLDING OF PROXY MATERIALS

The SEC has adopted rules that permit companies and intermediaries, such as brokers, to satisfy the delivery requirements for Notices of Internet Availability of Proxy Materials or other Annual Meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or other Annual Meeting materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially means extra convenience for stockholders and cost savings for companies.

This year, a number of brokers with account holders who are Marker stockholders will be "householding" the Company's proxy materials. A single Notice of Internet Availability of Proxy Materials will be delivered to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Once you have received notice from your broker that they will be "householding" communications to your address, "householding" will continue until you are notified otherwise or until you revoke your consent. If, at any time, you no longer wish to participate in "householding" and would prefer to receive a separate Notice of Internet Availability of Proxy Materials, please notify your broker or us. Direct your written request to Marker Therapeutics, Inc., Attn: Secretary, 4551 Kennedy Commerce Drive, Houston, Texas 77032. Stockholders who currently receive multiple copies of the Notices of Internet Availability of Proxy Materials at their addresses and would like to request "householding" of their communications should contact their brokers.

OTHER MATTERS

The Board of Directors knows of no other matters that will be presented for consideration at the Annual Meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the accompanying proxy to vote on such matters in accordance with their best judgment.

By Order of the Board of Directors,

Michael J. Loiacono

Secretary

Dated: April 28, 2023

A copy of the Company's Annual Report to the Securities and Exchange Commission on Form 10-K for the fiscal year ended December 31, 2022 is available without charge upon written request to Marker Therapeutics, Inc., Attention: Secretary, Marker Therapeutics, Inc., 4551 Kennedy Commerce Drive, Houston, Texas 77032.

MARKER THERAPEUTICS, INC. Proxy for Annual Meeting of Stockholders on June 6, 2023 Solicited on Behalf of the Board of Directors

The undersigned hereby appoints Juan Vera and Michael Loiacono, and each of them, with full power of substitution and power to act alone, as proxies to vote all the shares of common stock which the undersigned would be entitled to vote if personally present and acting at the Annual Meeting of Stockholders of Marker Therapeutics, Inc., to be held virtually on Tuesday, June 6, 2023 at 8:00 a.m. Central Time, and at any adjournments or postponements thereof, as set forth on the reverse side.

The Annual Meeting of Stockholders will be held virtually. In order to attend the meeting, you must register at http://viewproxy.com/markertherapeutics/2023/htype.asp no later than 11:59 PM Eastern Time on June 3, 2023. On the day of the Annual Meeting of Stockholders, if you have properly registered, you may enter the meeting by clicking on the link provided and the password you received via email in your registration confirmations. Further instructions on how to attend and vote at the Annual Meeting of Stockholders are contained in the Proxy Statement in the section titled "Questions and Answers about these Proxy Materials and Voting" under "How do I attend the Annual Meeting?" and "How do I vote?".

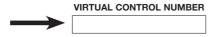
CONTINUED AND TO BE MARKED, DATED AND SIGNED ON THE OTHER SIDE

▲ PLEASE DETACH ALONG PERFORATED LINE AND MAIL IN THE ENVELOPE PROVIDED. ▲

Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting of Stockholders to be held on June 6, 2023. The Notice of Meeting, proxy statement, annual report and proxy card are available at: http://www.viewproxy.com/markertherapeutics/2023

The Board of Directors recommends you vote "FOR ALL" of the nominees in Proposal 1:			nees in Proposal	The Board of Directors recommends you vote "ONE YEAR" for Proposal 3.	
Election of Directors Nominees:	Nominees: FOR WITHHOLD FO		FOR ALL	To indicate, on an advisory basis, the preferred frequency of shareholder advisory votes on the compensation of the Company's named executive officers.	
01 David Eansor	04 Juan Vera	ALL	ALL	EXCEPT	☐ ONE YEAR ☐ TWO YEARS ☐ THREE YEARS ☐ ABSTAIN
02 Steven Elms 03 John Wilson	05 Katharine Knobil				The Board of Directors recommends you vote "FOR" Proposal 4.
INSTRUCTIONS: To withhold a write the number(s) of the non		lual nominee(s), mark, "FOR ALI	L EXCEPT" and	Ratification of the selection by the Audit Committee of the Board of Directors of Marcum LLP as the independent registered public accounting firm of the Company for its fiscal year ending December 31, 2023.
					☐ FOR ☐ AGAINST ☐ ABSTAIN
The Board of Directors recommends you vote "FOR" Proposal 2. 2. To approve, on an advisory basis, the compensation of the Company's named executive officers. ☐ FOR ☐ AGAINST ☐ ABSTAIN		In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting or any adjournment, continuation or postponement thereof. This proxy when properly executed will be voted as directed herein by the undersigned stockholder. If no direction is made, this proxy will be voted "FOR ALL" nominees in Proposal 1, "FOR" Proposals 2 and 4 and "ONE YEAR" on Proposal 3.			
				Date:	
					Signature of stockholder
					Signature of stockholder NOTE: Please sign exactly as your as your name or name(s) appear on this Proxy. When shares
					are held jointly, each holder should sign. When signing as an executor, administrator, attorney, or other trustee or guardian, please give full title as such. If the signer is a corporation, please sign full corporate name or partnership name by authorized officer, giving full title as such. If the signer is a partnership, please sign in partnership name by authorized person.
Address Change/Comment mark box.)	s: (If you noted any Addres	ss Changes	and/or Commen	ts above, please	VIRTUAL CONTROL NUMBER
_					—

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PROXY VOTING INSTRUCTIONS

Please have your 11-digit control number ready when voting by Internet or Telephone, or when voting during the Virtual Annual Meeting



INTERNET

Vote Your Proxy on the Internet up until 11:59 p.m. Eastern Time on June 5, 2023:

Go to www.AALVote.com/MRKR

Have your proxy card available when you access the above website. Follow the prompts to vote your shares.



TELEPHONE

Vote Your Proxy by Phone up until 11:59 p.m. Eastern Time on June 5, 2023:

Call 1 (866) 804-9616

Use any touch-tone telephone to vote your proxy. Have your proxy card available when you call. Follow the voting instructions to vote your shares.



MAIL Vote Your Proxy by Mail:

Mark, sign, and date your proxy card, then detach it, and return it in the postage-paid envelope provided.